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JOB SATISFACTION AND EMPOWERMENT OF SELF-EMPLOYED NURSE PRACTITIONERS:

A MIXED METHODS STUDY

A Dissertation

Submitted to the School of Nursing

Duquesne University

In partial fulfillment of the requirements for

the degree of Doctor of Philosophy

By

Catherine Lyden

May 2017

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Catherine Lyden

2017

JOB SATISFACTION AND EMPOWERMENT OF SELF-EMPLOYED NURSE PRACTITIONERS:

A MIXED METHODS STUDY

By

Catherine Lyden

Approved March 29, 2017

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ABSTRACT

JOB SATISFACTION AND EMPOWERMENT OF SELF-EMPLOYED NURSE PRACTITIONERS:
A MIXED METHODS STUDY

By
Catherine Lyden
May 2017

Dissertation supervised by Dr. L. Kathleen Sekula

Background and Purpose: Self-employed nurse practitioners (NPs) have been part of the American health care landscape since the 1980s, owning practices throughout the United States. The purpose of this study was to explore the lived experience of self-employed NPs, focusing on their level of job satisfaction and perceived level of empowerment.

Methods: The study was a convergent-parallel designed, mixed-method study, utilizing a survey and semi-structured interviews. The survey included the Misener Job Satisfaction Survey (MJSS) and Conditions of Work Effectiveness Questionnaire II (CWEQ-II)

Conclusions: A total of 142 surveys and 13 interviews were completed and analyzed. Nurse practitioners in private practice are both satisfied and empowered, irrespective of practice environment. The more empowered, the higher their level of job satisfaction.

Over 40% practiced with full practice authority, in a rural location and 50% had over 10 years' experience as both an RN and NP. Their experience in private practice was explored further in the interviews.

Implications: This study identifies barriers to job satisfaction and empowerment in self-employed NPs, including physician oversight and lack of business management education. Continuing work to remove, restrictive and reduced state regulatory environments, as well as education on business management, may increase the number of NPs in private practice, expanding access to health care for the American people.

DEDICATION

I would like to dedicate this to the Nurses who have gone before us, those forward thinking women who led the nursing profession. Florence Nightingale who was instrumental in transitioning nursing from a vocation to a profession. To social entrepreneurs Lilly Wald, and Mary Breckenridge who identified a gap in available care and developed programs to 'fill' the gaps.

Dr. Loretta Ford and pediatrician Henry Silver who developed the NP role. To the Nurse Practitioners (NPs) who paved the way for those of us now practicing by expanding our practice options and opportunities. NPs meet the needs of underserved rural communities and those who lack access to care in inner cities.

To the Nurse Practitioners in private practice who took time to complete the survey and to answer the questions in this study.

ACKNOWLEDGEMENT

A PhD is not completed by an individual but by a community, and I have been blessed with a wonderful community of support. I need to thank my parents, Judith and Brian Lyden who encouraged my sister and me to be 'the best we could be'. They encouraged and supported me through this process. I would like to thank Dr. Anne Lyden and Dr. Michelle Elleray, who were my inspiration, encouraging and supporting me through this process. Also to Shonagh, Ngaire and Kingsley who helped to spend a little time relaxing during the process.

Thanks go to my church family who prayed me through the process. My friends who accepted my 'rain-checks'; now we get to play. Michelle who helped me to get my interviews transcribed. Thanks to Bunny, who gave up some of her weekend to assist with the data entry of those surveys completed using hard-copy. To Dr. Julie Valentine, the other member of the cohort 19 *dynamic duo* who encouraged me throughout the program but especially as I completed my dissertation. To Betsea, who opened her home to me, allowing me to study, to defend my proposal, and then took me out to celebrate each step in my journey.

I also want to thank my dissertation committee: Dr. Sekula for taking my weekly phone calls with grace and humor, guiding me through the process of completing this study. Dr. Zoucha for his help with the qualitative aspects of this study; his feedback kept me on track. Dr. Higgins previously owned a private practice, her expertise and feedback on the study and manuscripts, I believe, helped me to more accurately represent this group of NPs. Dr. Duarte, my statistician, helped me to navigate the maze that is 'statistics', to verify test choice and accuracy with brevity for my results.

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JOB SATISFACTION AND EMPOWERMENT OF SELF-EMPLOYED NURSE PRACTITIONERS: A MIXED METHODS-STUDY

CHAPTER 1: INTRODUCTION

Introduction and Overview

This study addressed job satisfaction and empowerment of self-employed nurse practitioners. In this chapter, you are introduced briefly to the history of nurse practitioners, with a focus on private practice. The current literature on NP job satisfaction and empowerment is reviewed. Chapter 2 reviews the history of nursing within a sociopolitical context related to current scope of practice regulations and their effect on NPs in private practice. The study methodology is discussed in Chapter 3. This convergent-parallel design, mixed-method study utilized a survey and semi-structured interviews to examine the level of job satisfaction and empowerment in self-employed NPs. Using semi-structured interviews used the hermeneutic phenomenology method in a small subset of those who completed the survey; to explore the NP lived experience in further detail. Chapter 4 discusses the quantitative, qualitative and mixed method results. This study has used the manuscript option; chapter 2 and chapter 4 are written as manuscripts for publication.

The nurse practitioner (NP) role developed in 1965; celebrated its 50th anniversary in 2015. The Nurse Practitioner (NP) role, originally envisioned as an autonomous professional integral to the health care team, to expand access in rural and urban areas, at the same time expanding the role of the nurse. The NP was required to work as part of a team under direct medical control (Everett et al., 2013). However, as early as the late 1980s discussion in the NP

literature began to focus on autonomous or independent, private NP practice possibilities (Koch, Pazaki, & Campbell, 1992). By the 1980s there were approximately 300 NP owned practices.

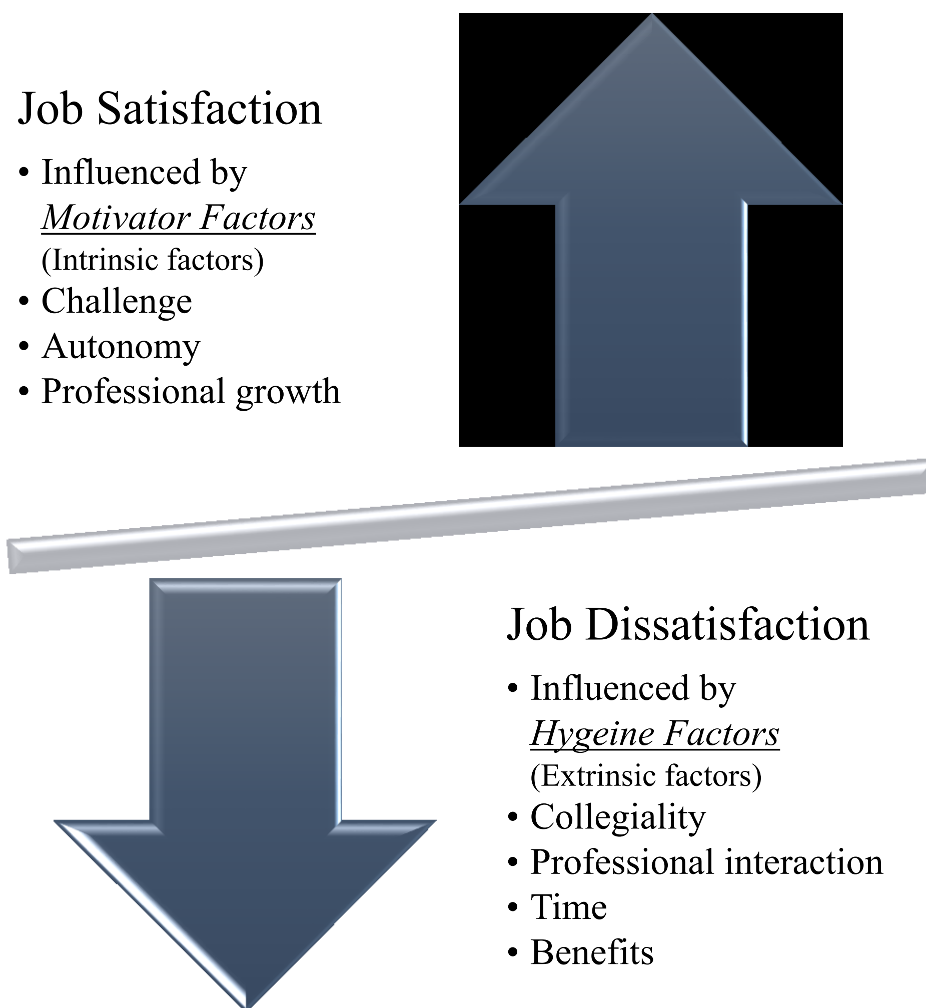
While NPs are primarily employees of institutions or physician owned practices, an increasing number of creative and innovative NPs are choosing to open an independent private practice. Of the 222,000 practicing NPs, spread throughout the fifty-two states and District of Columbia (DC), it is estimated that 4-10% (B. Phillips, personal communication, 2014; L. Riley, personal communication, 2013), are self-employed or work in an NP owned practice. This represents a number ranging from 12,000 to 30,000 NPs own or work in an NP owned fee-for-service practice. Nurse practitioners move into fee-for-service private practice in order to practice autonomously, provide an alternative model of care, improve patient access to care, and improve their job satisfaction (Dickerson & Nash, 1985; Levin, 1993; Tolman, 2011; Willis, 1993).

Job Satisfaction

Cumbey and Alexander (1998) identified job satisfaction as "an affective feeling that depends on the interaction of employees, their personal characteristics, values, and expectations with the work environment, and the organization" (para. 9). Herzberg's theory of job satisfaction identified job satisfaction and dissatisfaction as separate but interactive phenomena (Herzberg, 1966). He identified satisfiers as intrinsic factors related to the job itself, and dissatisfiers as extrinsic factors that arise from the work environment. Founded on Herzberg's theory, Misener and Cox (2001) developed the Misener Job Satisfaction Scale, which has been used to study NPs. They define job satisfaction as "a multidimensional affective concept that is an interaction of an employee's expectations, values, environment and personal characteristics,

and it is recognized that satisfiers and dissatisfiers are dynamic and relative to the employee" (Misener & Cox, 2001, p. 93).

Figure 1 – Misener Job Satisfaction



Three separate studies looked at job satisfaction in NPs employed in nurse-managed health centers (n = 99), primary care, including retail clinics (n = 310), identified a low to moderate level of job satisfaction (Lelli, Hickman, Savrin, & Peterson, 2015; Pron, 2013; Tri, 1991). A study by Schiestel (2007) focused on NPs practicing in Arizona (n = 155) also found a low to moderate level of job satisfaction. However, a small subset (n = 9) of self-employed NPs

in the Arizona study, a state that regulates autonomous NP practice, indicated a higher level of job satisfaction than the NPs who were employees (Schiestel, 2007). Koelbel, Fuller, and Misener (1991b) found that NPs working in a physician owned private practice in South Carolina (n = 132), also reported a higher level of job satisfaction. In contrast, NPs practicing in multiple specialties in a single health care organization in Florida (n = 17), a restrictive practice state, reported having a low level of job satisfaction (Pasarón, 2013).

Research has found an association between higher job satisfaction and intrinsic factors, such as level of responsibility and autonomy, time in patient care, and ability utilization (Misener & Cox, 2001). Increased job satisfaction has also been shown in relation to preserving a nursing-based practice, providing holistic care, being valued as professionals, and the development of a strong patient-provider relationship (Shea, 2015). De Milt, Fitzpatrick, and McNulty (2011) found that NPs were most satisfied with intrapractice partnership and collegiality, challenge and autonomy, and least satisfied with benefits.

Research also reveals an association between job dissatisfaction and extrinsic factors including compensation, organization goal compatibility, environmental support for innovation, time in administrative duties, opportunities for advancement, and supervisor relations (Misener & Cox, 2001; Schiestel, 2007). The lowest ranked factors are consistently identified as compensation, support for continuing education, research involvement, intrapractice collegiality and conflict resolution (De Milt et al., 2011; Misener & Cox, 2001; Pron, 2013). Reasons that NPs leave a position include lack of control of their practice and limited advancement opportunities (De Milt et al., 2011).

Empowerment

Kanter's (1993) theory of organizational empowerment identifies access to information, resources, support, and the opportunity to learn and develop, as key components of a structurally empowering environment. Research suggests that there is a positive relationship between psychological and structural empowerment (Laschinger, Finegan, Shamian, & Wilk, 2001). Psychological empowerment is the "psychological state that employees must experience for empowerment interventions to be successful" (Laschinger et al., 2001, p. 261).

A study of 117 NP's, suggests that NPs employed in primary care have a significantly higher perception of workplace empowerment compared to NPs in acute care (Almost & Laschinger, 2002). Studies also found that high levels of empowerment led to increased perception of autonomy and levels of collaboration with physicians and managers, contributing to a low level of job strain (Almost & Laschinger, 2002; Stewart, McNulty, Griffin, & Fitzpatrick, 2010). Empowerment subscales include opportunity, information, support, resources, formal power, and informal power (Laschinger et al., 2001). Patient satisfaction has been found to be positively correlated with nurses' perceptions of empowerment (M. Donahue, Piazza, Griffin, Dykes, & Fitzpatrick, 2008). Laschinger et al. (2001) found that there is an association between structural and psychological empowerment and job satisfaction. Bahadori and Fitzpatrick (2009) studied empowerment as a subscale of autonomy in primary care NPs. Within their sample, NPs were found to have higher levels of confidence in patient practice skills, mastery, and knowledge yet only moderate levels of empowerment. Posited reasons for lower levels of empowerment include limited hospital privileges, reimbursement obstacles, limited legal prescriptive authority for controlled substances, and the restrictions of collaborative agreements (Bahadori & Fitzpatrick, 2009).

Petersen, Keller, Way, and Borges (2015) studied NP autonomy and empowerment in New Mexico, a state that regulates autonomous practice for NPs. They found that NPs in urban settings with physician oversight had higher empowerment scores than NPs in rurally based independent practice (Petersen et al., 2015). It is posited that the rurally based NPs had fewer opportunities to collaborate with other providers; therefore, they had increased autonomy but a reduced perception of empowerment (Petersen et al., 2015). Further research is warranted to explore this unexpected and important finding.

Summary

The focus of this mixed method study is article reveals the dearth of published information on NPs in private practice, including a lack of research on their job satisfaction and perceived level of empowerment. Now increased numbers of Americans have health insurance, the struggle for many is to locate health care providers from whom they can obtain care. Self-employed NPs may be part of the solution as NPs are the fastest growing health care profession in the United States.

Available nursing literature regarding NPs in private practice, consists primarily of descriptive articles discussing how to set up a private practice (Dickerson & Nash, 1985). Other references to NP private practice are found in the popular press, such as NP or MD opinion pieces, published during a state-based push for removal of restrictive scope-of-practice regulations (Aaronson, 2013). Consequently, this literature review found a dearth of data-based studies focused on NPs in private practice.

Based on current health care policies, NPs are here to stay as high-quality, legitimate, and cost-effective providers, not just in primary care where they first began, but also in urgent care, schools, inpatient settings, and private practice. Nurse practitioners own private practices in

states with both unrestricted and restricted practice environments (Ungar, 2014; Vestal, 2013). Each NP-owned private practice follows state regulations regarding physician oversight.

Nurse practitioners employed in acute and primary care, including retail clinics in states with and without physician oversight identify a low to moderate level of job satisfaction. In a single study in Arizona, a state that does not require physician oversight, a small subset of NPs in private practice identified a high level of job satisfaction (Schiestel, 2007). The difference in job satisfaction revealed by the small subset in private practice bears further investigation in a larger sample of NPs in private practice.

Research also indicates that NPs have a moderately high to high level of structural and psychological empowerment (Stewart et al., 2010). High levels of empowerment in NPs appear to be associated with an increase in perceived levels of collaboration and autonomy (Stewart et al., 2010). Petersen et al. (2015) found that NPs in rural, independent practice in New Mexico, without physician oversight identified a high level of autonomy but a low level of empowerment. Empowerment scores were higher with physician oversight, and possibly related to increased opportunities to collaborate (Petersen et al., 2015). This is an unexpected finding and warrants further evaluation on a larger sample (Petersen et al., 2015).

Research focused on NPs in private practice may benefit the American public by identifying barriers to NPs in private practice, therefore informing local state and the federal government regarding barriers to increasing the number of available primary care providers. The results may also inform nursing educators, as well as state and national conference organizers concerning NP perceived knowledge or skill deficits regarding business management including assertiveness and negotiation skills in NP curricula. It may also provide information for regulators and nursing lobbyists regarding regulations that unnecessarily restrict an NP's ability

to open and maintain a private practice (Edmunds, 1982). The results may support those NPs interested in opening a private practice, therefore increasing the number, availability and distribution of NPs especially in rural or underserved areas.

CHAPTER 2 – Manuscript 1

This review of the literature was submitted to the Journal of the American Association of Nurse Practitioners (JAANP). Feedback has been received, the manuscript has been revised and will be resubmitted.

The Self-Employed Nurse Practitioner, the Regulatory model and Physician Oversight

Introduction

Today in America, there are over 222,000 NPs in practice, 96% have a graduate degree, 96% maintain graduate certification, with 83% working in primary care (AANP, 2016a). While the initial focus of the NP role was pediatrics, over the past 50 years the role has seen an expansion of educational concentrations, allowing prospective NPs to choose programs focused on acute care, women's health, mental health, pediatrics, or primary care. Today NPs are employed in prisons, specialty practices, inpatient acute care settings, nurse-led or managed clinics, and private NP owned practices. It is estimated that 95% of NPs are employees of either institutions or physician practices, and the remaining 5% are self-employed or work in an NP-owned private practice (Riley, 2013).

Americans continue to struggle to obtain timely access to primary care providers due to physician shortages and maldistribution of health care providers. Recently the deficit has been exacerbated following passage of the Affordable Care Act, when a further 13 to 14 million individuals gained health insurance and required access to primary care services (Petterson et al., 2012). In addition, as the American population ages and lives longer, the deficit is expected to exceed 52,000 primary care providers by 2025 (Petterson et al., 2012). Research suggests that NPs possess comparable clinical abilities to physicians, provide safe, effective and high quality

care indistinguishable from that provided by physicians, and often have stronger communication skills (Mullinix & Bucholtz, 2009). Nurse practitioners are seen as a panacea for the shortage, as they remain the fastest growing, most common non-physician health care provider in the United States (Yong-Fang, Rounds, & Goodwin, 2013).

Nursing has a long history of entrepreneurship, beginning with Florence Nightingale who brought the first British nurses to the front line in Crimea. Entrepreneurship may be 'social' focused on improving the conditions and health for an underserved population e.g. Henry Street Settlement. However, entrepreneurship is more commonly associated with opening a business as seen in the global increase in self-employed nurses including NPs (Currie, Chiarella, & Buckley, 2013; Wall, 2015; Wilson, Averis, & Walsh, 2004). Entrepreneurial nurses including nurse practitioners (NPs) face difficulties due to societal views on women as caring and mother figures which raises questions surrounding payment for any care provided (Sharp & Monsivais, 2014; Wall, 2015). Self-employed NPs face restricted and reduced practice authority in multiple US states due to external economic, social, jurisdictional, and regulatory barriers that require physician oversight or supervision for some aspect of patient care (Wall, 2013).

Relationship between nursing and medicine

Nurses, or deaconesses as they were originally called, have responded to the needs of society since the first century. Deaconesses were associated with religious orders; nursing was seen primarily as a vocation (Cox, 1982; M. Donahue, 2011). It was during the Crimean war that the value of nursing was recognized and it began transitioning to a profession. The conditions at the English base of Scutari were appalling with a 42% mortality rate due to the lack of sanitary-care for the injured soldiers. Following the arrival of Florence Nightingale and 38 nurses, the death rate dropped to 2% (M. Donahue, 2011). Florence Nightingale was a nurse, a

social entrepreneur, an educator, an administrator, and a statistician, although she is primarily recognized for her nightly patient rounds by lamp light, leading to her title ‘The lady with the lamp’ (M. Donahue, 2011).

Since the time of Florence Nightingale, nurse social entrepreneurs have continued to assist the underserved rural and urban populations during war and peace using their full-scope of practice. Lillian Wald and Mary Breckenridge were the earliest American examples of social entrepreneurs. Lillian Wald, a graduate nurse enrolled in medical school was asked to provide education in the Henry Street settlement. While in the settlement, horrified by the living conditions, she left medical school to open the Henry Street Settlement (HSS) clinic in 1893. The clinic provided comprehensive care including necessities such as food and medicine, as well as referrals to physicians and hospitals for care (Keeling, 2015). Over the next decade, as pharmaceutical and other treatment options changed rapidly, the HSS nurses dispensed physician-prescribed treatments to their patients, including poultices and aspirin based on their knowledge and previous experience (Keeling).

Seven hundred and twenty-five miles southwest, Mary Breckenridge, a trained nurse-midwife, established the Frontier Nursing Service (FNS) in 1925. The FNS was set up to provide healthcare in the Appalachian mountains, focused on reducing maternal and infant mortality (Lee, 1971). Lesley County in Kentucky was remote and lacked services, the FNS used a mixture of registered nurses and nurse-midwives, practicing in either permanent outposts, or as visiting nurses travelling on horseback, to provide needed care. The infant and maternal mortality rate decreased rapidly under the care of the FNS; conversely, it took 30 years for the rest of the country to attain the same rate (Tirpak, 1975). The nurses’ primary focus was illness

management, however social issues such as food and running water were also evaluated not just for the patient, but also the family unit (Lee, 1971).

In 1903, nursing registration laws were enacted initially to protect the title ‘nurse’ and regulate licensing. Scope of practice regulations came to the fore in the middle of the 20th century when the American Nurses Association (ANA) agreed with the medical community that diagnosis, and the prescription of treatment, including pharmaceuticals, was a practice of medicine; thus securing the longevity of restrictive nursing practice acts (Keeling, 2015). The change in regulations affected social entrepreneurs like Wald and Breckenridge as it lead to the need for written treatment protocols, and the development of a medical supervising board for HSS nurses and the FNS (Keeling, 2015). Prior to the new regulations, nurses employed at HSS provided care in accord with their full scope-of-practice, which included public health, home care, primary health care and midwifery services (Keeling, 2015). However, over the next decade as healthcare became more institutionalized and less community based, physicians and hospital administrators increasingly took control of the health care system, leaving nursing in a subservient position (M. Donahue, 2011).

The story of nursing reflects the story of women in America. The first women immigrated to the United States, experiencing the same hardships as their male counterparts, yet were viewed as weak and inferior physically, spiritually and legally (Day, 2001). Women’s suffrage began prior to the Civil War; nurses including Lavinia Dock were very involved in fighting for the right of women to vote. The movement lost steam during the war as women were called upon to support their country by managing not just homes, but also farms and estates, while materially supporting the army (Day, 2001). Having experienced increased autonomy, women were dissatisfied when following the war they were expected to return to

managing their domestic sphere (Day, 2001). The suffragette movement reignited, and in 1920 after a long hard battle, the 19th Amendment was ratified.

Within three years following the ratification of the 19th Amendment, Alice Paul proposed the Equal Rights Amendment (ERA). The ERA sharply divided the women of America, with each side lobbying state legislatures to decide the vote. It was passed by the Senate in 1972, nevertheless it has never been ratified, as only 35 of the 38 required state legislatures passed the Amendment. The ERA provided for equal rights for women and men, and assigned Congress the power to enforce the provisions of the article. One of the concerns of the anti-ERA group were women in the military; notwithstanding their concerns, women were approved unofficially in 2001, then officially in 2013, to serve in combat positions, with the increase in concomitant military gender-based issues. In contrast the pro-ERA group fought for equal pay for equal work irrespective of gender, which has never been obtained; nursing and medicine are two examples. In the 1970s 2.7% of nurses were men, in 2016 that had increased to 8%; 41% of male nurses practice as nurse anesthetists and 8% are NPs (Landivar, 2013; The Henry J. Kaiser Family Foundation, 2017). Likewise, the percentage of female physicians increased by over 400%, from 7.6% (1970s) to 34% (2016) (Freedman, 2010; Henry J. Kaiser Family Foundation, 2017). However, female nurses and physicians across the board, earn significantly less than their male counterparts (Desai et al., 2016; Edmunds, 2015; Muench, Sindelar, Busch, & Buerhaus, 2015).

Nursing – 'handmaiden'

Nursing is viewed as the archetypal female role, typecast as passive, ignorant, docile, mundane, and 'women's work', practiced in the home as an extension of maternal functions (Cleland, 1971; Porter, 1992). In contrast, medicine has always been seen as a male role, stereotyped as aggressive, intelligent and efficient (Cleland, 1971; Porter, 1992). This lead to a

hierarchical and patriarchal system where nurses were identified as *physician handmaidens*, which reflects the accepted gender division between women and men (Price, Doucet, & Hall, 2014; Roberts, Demarco, & Griffin, 2009). Following the Civil war, as physician run hospitals promulgated, nursing became an institutional profession. In order to maintain a constant supply of nurses and to keep hospital costs down, an apprenticeship model of nursing education was used, primarily taught by physicians (EssentialHospitals.org, 2017; Price et al., 2014). Physician control of education maintained the status quo of gender based oppression for nursing (Roberts et al., 2009).

Since the 1980s nursing has become more autonomous, in part because of the women's movement, along with the nursing shortage causing nurses to clarify their role (Stein, Watts, & Howell, 1990). Nursing education has also transitioned to the academic setting, where students are taught to identify nursing as a profession that has a different, but equal, role to medicine within the inter-disciplinary health care team (Porter, 1992; Stein et al., 1990). As nursing roles have broadened to include utilization review and quality assurance, as well as advanced practice roles, inter-disciplinary relationships have also changed (Stein et al., 1990). The increased number of female doctors may also be mitigating the gender based power imbalance between nursing and medicine (Porter, 1992).

Nurse Practitioner – Autonomous Professional?

The original conception of the NP role was as an autonomous professional integral to the health care team by expanding access to health care in rural and urban areas. When it was initially proposed in the 1960s, the idea of an autonomous nursing role was considered controversial by both nursing and medical leadership (Koch et al., 1992). The NP was required to work as part of a team under direct medical control (Everett et al., 2013). However, as early

as the late 1980s, discussions in the NP literature began to highlight entrepreneurial self-employment possibilities and opportunities for autonomous or independent NPs (Koch et al., 1992).

Independent means not being "subject to control by others … not requiring or relying on" another (Merriam-Webster.com, 2014b). *Autonomous* indicates "existing or acting separately from others; the power or right of a … group, etc., to govern itself" (Merriam-Webster.com, 2014a). Attributes of autonomy include independence, freedom from outside controlling forces, self-regulation, knowledge of external controlling influences, and the capacity and authority to make decisions. Autonomy is also found within the patient-practitioner relationship built on equality, trust, and patient-centered care (Willis, 1993). The terms independent and autonomous in nursing literature are used interchangeably (AANP, 2015). For the purposes of this paper independent and autonomous nursing practice are identified as having the right and power of self-governance, including the capacity and authority to make independent clinical decisions, represented as full practice authority. This includes responsibility and accountability for practice to the profession (including the appropriate state board of nursing), as well as the local, community, and society at large (AANP, 2015).

The NP role offers a way for nurses to independently "evaluate patients, diagnose, order and interpret diagnostic tests, initiate and manage treatments – including prescribing medications – under the exclusive licensure authority of the state board of nursing" (AANP, 2016b). Nurse practitioners are trained to be decision makers using advanced knowledge and skills to care for patients while working in collegial and collaborative relationship with other health care providers (AANP, 2015). Nurse practitioners currently provide care for individuals with acute or episodic illnesses and chronic diseases, as well as facilitating health care maintenance (Koelbel et al.,

1991b). Recently the Institute of Medicine, Federal Trade Commission, and National Governors Association have all recommended removal of physician oversight requirements, allowing NPs to practice to the full scope of their education and licensure (Federal Trade Commission, 2014; Lowes, 2014).

As state regulations provide NPs the right to practice with full practice authority in many states, it is important to remember that practicing autonomously is not the same as ‘practicing in isolation’ (Dirubbo, 2005). Nurse practitioners with full practice authority make decisions in consultation with the patient in addition to working within collaborative, professional, inter-disciplinary relationships with other health care providers (Desborough, Parker, & Forrest, 2013). De Milt et al. (2011) found that 72% of NPs had their DEA license, 67% of NPs had full prescriptive authority, 58% were able to prescribe controlled substances, and 30% had admitting privileges. Even though these results reflect an increased scope of practice, they are a reminder that NPs still have a way to go before every NP is able to provide autonomous and comprehensive patient care.

Early Nurse Practitioner Education

In 1965 when Dr. Loretta Ford and pediatrician Henry Silver launched the NP role, medicine was seen as superior to nursing, and state regulations clearly delineated diagnosis and the dispensing of treatment as practicing medicine. The development of the NP role met with resistance within nursing academic leadership; even into the 1980s, there were nurse leaders who saw the role as a medical, not a nursing role. In contrast, practicing nurses were excited about the opportunities for growth, and their ability to provide care to people who had limited access to health care (Pearson, 1985). The NP role was developed initially to increase the availability of

health care providers in the community, however more recently that role has expanded to include institutions including hospitals and prisons. It was also meant to expand the role of the nurse.

Originally, applicants to NP programs were required to have a master's degree, however due to a shortage of candidates, the program started with nurses who were qualified to enter a master's program transitioning instead to a continuing education (CE) program. The average duration of CE programs in 1973 was 8.5 months, by 1980 it was 11.7 months (Sultz & Bullough, 1983). Nurses graduating from CE programs were normally older, employed in rural, community settings and educated at the diploma level (Hsiao & Edmunds, 1982). Schools were run by both universities e.g. University of Colorado and hospitals e.g. the Bunker Hill/Massachusetts General NP program in Boston, run in partnership with nursing and medicine (Pulcini & Wagner, 2002).

The first master's level NP program started at Boston College in 1967; by 1999 there were 320 schools offering master's level programs. The average duration of master's programs was 15-16 months, they were run by universities, and graduates were more likely to work in urban areas (Hsiao & Edmunds, 1982; Sultz & Bullough, 1983). The certification (CE) programs peaked in 1977, however as masters level programs increased and became the preferred program, the number of CE programs declined rapidly during the eighties (Sultz, Henry, Kinyon, Buck, & Bullough, 1983).

In 2004, the American Association of Colleges of Nursing (AACN) identified a need for advanced training for NPs, identifying that entry to practice would change to a doctorate by 2015 (AACN, 2012). This was at the recommendation of the Institute of Medicine (IOM) and the National Academy of Sciences' call to increase the number of doctorally prepared nurses. The overarching goals of doctoral-level education are to bring nursing education in line with health

care professionals such as physicians, pharmacists and physical therapists, to address concerns regarding patient safety and quality of care, and the increasing patient complexity (Robert Wood Johnson Foundation, 2010; Rosseter, 2016). The first Doctor of Nursing Practice (DNP) program was offered in 1979 at Case Western University; in 2016 there were 289 DNP programs. While the number of DNP graduates continues to increase, only 20% (4,100) of the 20,000 NPs who graduated between 2014 and 2015 completed a DNP, demonstrating that the number of programs and graduates are not at the required level to meet the AACN goal (AANP, 2016a; Rosseter, 2016).

The Development of Private Practice

Private practice is defined as practicing within a setting "in which the practice and the practitioner are independent of external policy control other than ethics of the professional and state licensing laws" (Farlex Medical Dictionary, 2009). Nursing literature defines private practice or self-employment, as a solo proprietorship, partnership or collaboration where the nurse or NP is personally reimbursed for health care provided by the individual, a health insurance company, or other third party (Amundsen & Corey, 2000; Dirubbo, 2005; Wall, 2013).

Wall (2013) suggests that NPs open a private practice to gain autonomy in the interest of patient care, to provide an alternative to the medical model, and to personalize and improve patient care outcomes. Nurse practitioners may also move into private practice to promote new ideas about health and health care with an emphasis on providing holistic care while practicing within the bounds of a nursing philosophy (Wall, 2013). Self-employment has also been associated with a focus on practice success and personal achievement (Amundsen & Corey, 2000).

Nurse practitioners have been self-employed since the 1970s. In the 1980s it was estimated that there were approximately 300 NP owned private practices (OTA, 1981). Following passage of the 1977 Rural Health Care Act (P. L. 95-210) Medicare and Medicaid funds became available for qualified NPs working in rural areas. Passage of the Rural Health Care Act was fraught with difficulties for NPs related to obtaining reimbursement. Under the act, NP ownership of a clinic was permitted with physician supervision. Initially, reimbursement for NP services required onsite supervision, limiting NPs from providing care except when the physician was physically present. Over time, oversight regulations changed; some states required the physician to be onsite at least once every two weeks and the clinic to have an agreement with local hospitals to accept patient referrals. The American Medical Association, while supporting the use of NPs, opposed payment to NP owned or run clinics requiring the payment be made to the supervising physician (OTA, 1981).

The main barriers to an NP opening a private practice continue to be restrictive nursing regulations that require physician collaborative or supervisory agreements, and restrictive billing and reimbursement policies (Yee, Boukus, Cross, & Samuel, 2013). Currently, NPs receive direct reimbursement from Medicaid fee-for-service programs as well as Medicare for services provided (Van Vleet & Paradise, 2015). However, Medicare reimburses NPs 85% of the physicians fee for the same service, which may affect an NP's ability to maintain a private practice (Frakes & Evans, 2006). Third-party reimbursement disparity appears negatively correlated with state regulations (Amundsen & Corey, 2000; Poghosyan et al., 2013). Research shows that the top NP Medicare billing states are those with higher numbers of NPs in Health Service areas that do not require physician oversight to provide patient care (DesRoches et al., 2013). It remains crucial for NPs to develop assertiveness, and business and negotiation skills, in

order to gain greater control over the economics of their practice including reimbursement, as well as control over their state regulatory model (Pearson, 1985).

State regulatory environment

Nurse practitioners are recognized in the 50 states, and the District of Columbia (DC). They are required to be registered with their local state board of nursing (SBON), and are regulated by nurse practice acts (NPA) (National Council States Boards of Nursing, 2016). The purpose of NPAs enacted by individual state legislature is focused on regulating safe and competent nursing care, in turn protecting those who require that care (Russell, 2012). The NPA, with some state variability, identifies education standards and scope of practice, as well as discipline and licensing requirements. The SBON mandates the administrative processes and rules that licensed nurses including registered and practical nurses are required to follow to maintain their practice license.

The independence of each SBON has led to differing views on the amount of oversight required for an NP to practice, which can be at odds with local NP groups. State NPAs are dynamic documents and can be opened by the SBON as scope of practice is adjusted. When laws are changed there is time for public comment, and the state Senate, House or Assembly may approve or kill the bill. It then goes to the state governor who may veto or sign the bill into law. This has been evident in multiple states where it has taken years of lobbying and multiple bills, before the law is changed removing regulatory requirements for physician oversight of NP practice (Ungar, 2014). A recent example is California SB 323, which removed physician oversight requirements, allowing NPs to work independently as long as they contracted with a medical group; the bill died in the Assembly (Aguilera, 2015). One of the biggest opposing groups in California and nationally is the American Medical Association (AMA) which works

through local affiliates. The AMA believes that independent NP practice places patients at risk due to a lower level of NP expertise, reducing patient outcomes, subsequently creating a 2-tier healthcare system (Aguilera, 2015; Jacobson, 2013; Ungar, 2014).

Currently 21 states and DC regulate full practice authority for NPs with regulatory authority for NPs maintained exclusively through the board of nursing (AANP, 2015). Full practice authority allows NPs to independently evaluate, diagnose, and treat patients, including the prescription of medications (AANP, 2015). These states include Alaska, Arizona, Colorado, Connecticut, District of Columbia, Hawaii, Idaho, Iowa, Maine, Maryland, Minnesota, Montana, Nebraska, Nevada, New Hampshire, New Mexico, North Dakota, Oregon, Rhode Island, Vermont, Washington, and Wyoming (AANP, 2015). The remaining states, have reduced or restrictive practice acts requiring physician oversight in the form of a collaboration or supervision agreement in order for an NP to provide some aspect of patient care (NONPF, 2013).

States that legislate physician oversight require contractual physician involvement in NP practice in the form of a supervisory or collaborative contract. For example, Massachusetts regulations for prescriptive practice specify that the NP must identify a supervising physician, specify the nature and scope of the NP prescriptive practice and when consultation or referral is required (Massachusetts State Board of Nursing, 2014). It also provides full authority to the board of medicine to monitor and investigate APRN activities (Massachusetts State Board of Nursing, 2014).

Success of the collaborative agreement requires understanding by both sides regarding the similarities and differences in philosophies and beliefs. While collaborative or supervisory agreements are voluntary on the part of the physician, in those states with reduced or restricted environments they are mandatory for the NP (NONPF, 2013). One of the biggest challenges for

NPs is locating a physician who will agree to provide oversight and sign the contract (Aaronson, 2013; Jacobson, 2013). Once the contract is signed, if a physician cancels the arrangement this may force the NP to close their practice until the NP can locate a new physician willing to provide oversight. Two NPs almost closed their doors, one when a physician died (Jacobson, 2013) and the other when the physician moved out of state (Ungar, 2014), which would have left the NP's patients without a provider (Gillespie, 2014; Ungar, 2014).

The Federal Trade Commission (2014) recognized that a collaborative or supervisory agreement may restrict true collaboration between providers due to the hierarchal nature of the relationship, therefore impeding innovation, and decreasing productivity while exacerbating the maldistribution of primary care services. Research reveals that NPs employed in an institutional setting identified moderate to high levels of collaboration with physicians; collaboration involves mutual recognition of concerns as well as jointly negotiated resolutions (Maylone, Ranieri, Griffin, McNulty, & Fitzpatrick, 2011). Interprofessional collaboration can be rewarding and satisfying as well as a tool for growth in knowledge, skills, and self-esteem (Koelbel et al., 1991b). However, restrictive state-specific scope of practice regulations may leave the NP feeling vulnerable regarding their decisions and reduce appropriate utilization of NPs to meet the healthcare needs of the population (Lyden, 2017; National Organization of Nurse Practitioner Faculties, 2013). In contrast, NPs able to make independent clinically-based decisions experience higher utilization and productivity (Chumbler, Geller, & Weier, 2000).

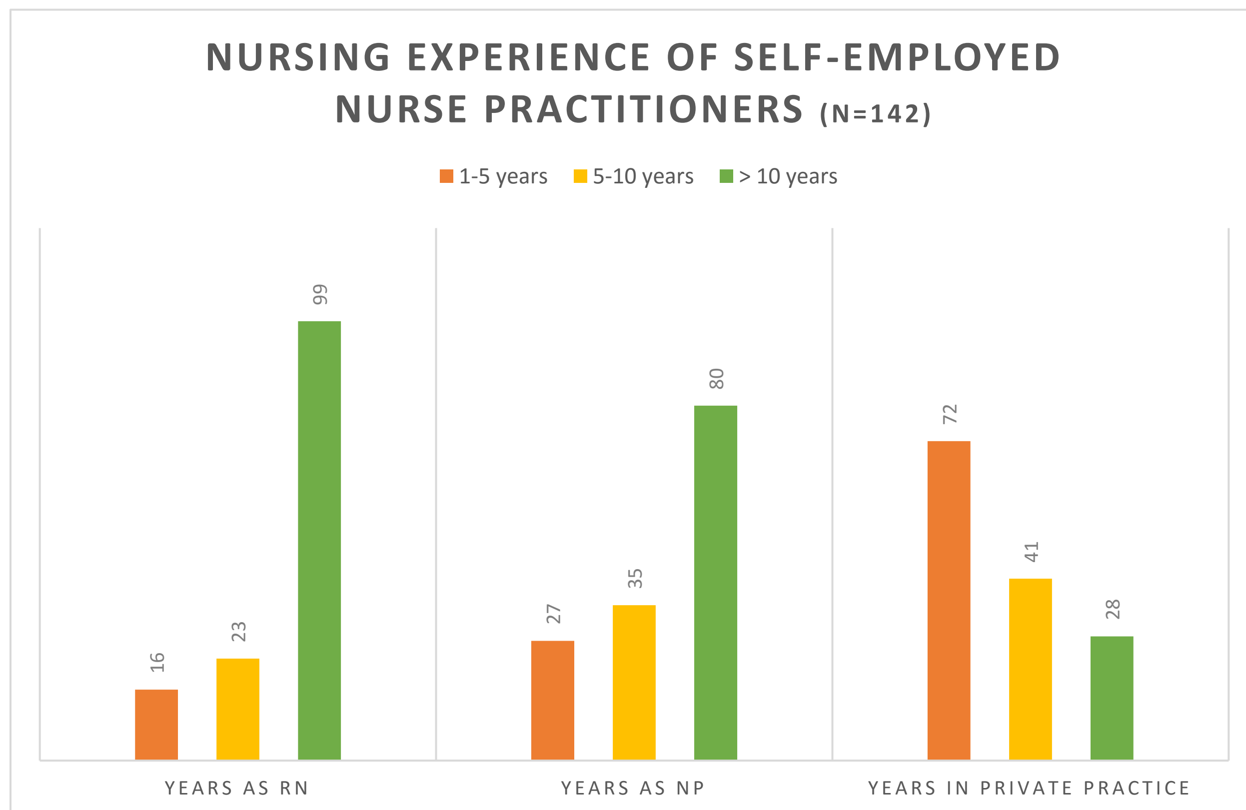
Contemporary discussions in the popular media regarding physician oversight and autonomous practice for NPs are often associated with a push to change state practice regulations and are primarily opinion pieces. The articles are presented from the perspective of either the NP who is promoting removal of physician oversight (Aaronson, 2013; Tavernise, 2015; Ungar,

2014) or from a physician who is promoting physician oversight (Jacobson, 2013; Jauhar, 2014). Articles have focused on NP owned private practices in Texas, New Mexico, California, Connecticut, and New Hampshire (Aaronson, 2013; Pittman, 2014; Ungar, 2014; Vestal, 2013).

Concerns regarding scope of practice identified by physicians directly affect entrepreneurial NPs in states with reduced or restrictive practice regulations. Nurses are used to working in a team under direct medical supervision, therefore NPs employed by institutions or physician owned practices are used to working in a team environment. Scope of practice regulations may not directly affect their ability to provide patient care as employing institutions and physicians develop systems to manage controversial issues such as durable medical equipment, scheduled medications, or death certificates. Physician oversight is part of the daily routine, even for those who work 'independently' without direct supervision within their employing institution or practice: the state oversight is identified within institutional documents such as job descriptions. However, for entrepreneurial NPs these are very real issues, directly affected by societal beliefs that affect the right of these NPs to practice independently.

Physicians fight against independent NP practice due to lack of NP education and experience. A small (n= 142) national study of self-employed NPs (Table 1) found that over 70% had been an RN for 10 years or more; 56% percent had been practicing as an NP for more than 10 years, and 49% had been in private practice for at least 10 years (Lyden, 2017). This appears to indicate that entrepreneurial NPs are experienced with extensive nursing, and NP experience obtained prior to transitioning into self-employment.

Table 1 – Duration of Nursing Experience of Self-Employed NPs



The other major issue for physicians is lack of education, citing the fact that Medical school requires graduation from a bachelors program, and then takes three or four years; however, since 2012 an increasing number of medical schools have shortened their program to three years (Cangiarella, Gillespie, Shea, Morrison, & Abramson, 2016). Texas Tech University Health Sciences Center in Lubbock graduated its first accelerated or 3 year class in 2013, and New York University started its program in 2013; admitting a select group of students who have opportunities to move into a full range of specialties including neurosurgery or family practice following the appropriate residency (Boodman, 2014).

Table 2 – Education levels of Self-employed NPs

Highest Degree	MSN	100(70%)
	DNP	32 (23%)
	PhD	9 (6%)
Certification	AANP	69 (48%)
	ANCC	45(31%)
	Dual	18 (12%)
	Other	8 (6%)

Nurse practitioner education also begins with an undergraduate degree, similar to medical school. Following graduation a master's level advanced practice degree takes a further two years full-time, whereas a DNP degree takes longer. A small (n= 142) national study of self-employed NPs (Table 2) found that over 70% had a master's degree with the other 30% having a doctorate, 6% of a PhD (Lyden, 2017). Over 90% of the studied NPs are nationally certified, to maintain certification a minimum of 75 continuing education hours, including 25 pharmacotherapeutic hours and 1000 practice hours are required every five years.

Requirements for supervision of NPs is state based, for example in Massachusetts the collaborating physician must review patient charts where treatment plans include prescriptions at least once every 3 months. The number of charts requiring review ranges from 5 to 20%, with some states recommending the number be based on physician and NP discretion, other requirements include face to face meetings monthly, and proximity of physician practice to NP.

Summary and conclusions

Based on current health care policies, NPs are here to stay as high-quality, legitimate, and cost-effective providers, not just in primary care where they first began, but also in urgent care,

schools, inpatient settings, and private practice. Nurse practitioners own private practices in states with both unrestricted and restricted practice environments (Ungar, 2014; Vestal, 2013). Each NP-owned private practice follows state regulations regarding physician oversight.

Available nursing literature regarding NPs in private practice, consists primarily of descriptive articles discussing how to set up a private practice (Dickerson & Nash, 1985). Other references to NP private practice are found in the popular press, such as NP or MD opinion pieces, published during a state-based push for removal of restrictive scope-of-practice regulations (Aaronson, 2013). Consequently, this literature review found a dearth of data-based studies focused on NPs in private practice.

Research focused on NPs in private practice may benefit the American public by identifying barriers to NPs in private practice, therefore informing local state and the federal government regarding barriers to increasing the number of available primary care providers. The results may also inform nursing educators, as well as state and national conference organizers concerning NP perceived knowledge or skill deficits regarding business management including assertiveness and negotiation skills in NP curricula. It may also provide information for regulators and nursing lobbyists regarding regulations that unnecessarily restrict an NP's ability to open and maintain a private practice (Edmunds, 1982). The results may support those NPs interested in opening a private practice, therefore increasing the number, availability and distribution of NPs especially in rural or underserved areas.

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CHAPTER 3: METHODOLOGY

The original conception of the NP role was as an autonomous professional, integral to the health care team, by expanding access in rural and urban areas (Pearson, 1985). The NP was viewed as a physician extender, required to work as part of a team under direct medical control (Everett et al., 2013; Koch, Pazaki, & Campbell, 1992; Levy, 1966). However, as early as the late 1980s, discussion in the NP literature began to focus on NP autonomy and private practice (Koch et al., 1992). Nursing literature defines private practice as a solo proprietorship, partnership, or collaboration where the NP is personally reimbursed for health care provided by the individual, a health insurance company, or other third party (Amundsen & Corey, 2000; Dickerson & Nash, 1985; Wall, 2013).

It is estimated that 95% of NPs are employees of either institutions or physician practices; the remaining 5% are self-employed or work in an NP-owned private practice (Riley, 2013). Nurse practitioners own private practices in states with both unrestricted and restricted practice environments (Ungar, 2014; Vestal, 2013). Restrictive states regulate partially autonomous or joint regulation requiring physician oversight in the form of a collaborative or supervisory agreement in order for an NP to provide some aspect of patient care (NONPF, 2013). The most restrictive states are Florida, North Carolina, South Dakota, and Virginia, which require joint regulation of NP practice by the state boards of nursing and medicine (Lowery, 2012). Currently 21 states and DC regulate unrestricted or full practice authority for NPs (AANP, 2015). Full practice authority allows NPs to "evaluate patients, diagnose, order and interpret diagnostic tests, initiate and manage treatments, including prescribing medications" (AANP, 2015, p. 1) while being licensed only by their state BON with no requirement for physician oversight. These states include Alaska, Arizona, Colorado, Connecticut, District of Columbia, Hawaii, Idaho, Iowa,

Maine, Maryland, Minnesota, Montana, Nebraska, Nevada, New Hampshire, New Mexico, North Dakota, Oregon, Rhode Island, Vermont, Washington and Wyoming (AANP, 2015; Ungar, 2014; Vestal, 2013). Each NP owned private practice follows state regulations regarding physician oversight. For example NPs in Oregon, Arizona, and Nevada do not require physician oversight to provide any aspect of patient care, in contrast, NPs in California require physician supervision including documented procedures for prescribing schedule II – V narcotics (AANP, 2014).

Various studies have been conducted regarding nurse practitioners employed in acute and primary care, in retail clinics, and in states with and without physician oversight, identify a low to moderate level of job satisfaction. In a single study in Arizona, a state that does not require physician oversight, a small subset of NPs (n=9) in private practice identified a high level of job satisfaction (Schiestel, 2007). The difference in job satisfaction revealed by the small subset in private practice bears further investigation in a larger sample of NPs in private practice.

Research also indicates that NPs have a moderately high to a high level of structural and psychological empowerment (Stewart, McNulty, Griffin, & Fitzpatrick, 2010). High levels of empowerment in NPs appear to be associated with an increase in perceived levels of collaboration and autonomy (Stewart et al., 2010). Petersen, Keller, Way, and Borges (2015) found that NPs in rural, independent practice in New Mexico, without physician oversight identified a high level of autonomy but a low level of empowerment. Empowerment scores were higher with physician oversight, and related to increased opportunities to collaborate (Petersen et al., 2015). This is an unexpected finding and warrants further evaluation in a larger sample (Petersen et al., 2015).

Research focused on NPs in private practice may benefit the American public by identifying barriers to NPs in private practice, therefore informing local, state, and the federal governments regarding barriers to increasing the number of available primary care providers. The results may also inform nursing educators at the university level, as well as state and national conference organizers concerning NP perceived knowledge or skill deficits regarding business management including assertiveness and negotiation skills (RWJF, 2010). It remains crucial for NPs to develop assertiveness, business, and negotiation skills in order to gain greater control over the economics of their practice including reimbursement and their state regulatory model (Pearson, 1985). It may also provide information for regulators and nursing lobbyists regarding regulations that unnecessarily restrict an NPs ability to open and maintain a private practice (Edmunds, 1982). The results may support NPs interested in opening a private practice, therefore increasing the number, availability and distribution of health care provider's especially in rural or underserved areas.

Statement of the research question

Quantitative

- What is the level of job satisfaction of nurse practitioners; practicing with or without physician oversight, who own a private practice?
- What is the perceived level of empowerment of nurse practitioners; practicing with or without physician oversight, who own a private practice?
- Is there a relationship between empowerment and job satisfaction in NPs in private practice?
  - Primary hypothesis: That NPs in private practice with or without physician oversight, have different perceived levels of job satisfaction.

- Secondary hypothesis: That NPs in private practice working with or without physician oversight have different perceived levels of empowerment.

Qualitative

- What is the lived experience of nurse practitioner in private practice?

Research design and procedures

This convergent-parallel design, mixed-method study utilized a survey and semi-structured interviews. Initial entry into the study was through the survey. The final survey question offered the participant the opportunity to take part in a semi-structured personal interview. Those interested in being interviewed provided contact information and then were contacted by the primary investigator regarding participation. The survey and semi-structured interviews were collected concurrently. Quantitative data analysis was completed following analysis of the qualitative data to reduce the risk of bias during qualitative data collection and analysis. Following analysis of the data in both strands the results were merged and evaluated for convergent or divergent findings, relationships or contradictions (Creswell & Plano Clark, 2012).

Instruments

Demographic questionnaire (Appendix A): developed by the primary investigator, focuses on the characteristics of the participants and their practice.

Misener Job Satisfaction Survey (MJSS) (Appendix B). Has been used previously with NPs to evaluate job satisfaction and has been found to be valid and reliable (Dunaway & Running, 2009; Kacel, Millar, & Norris, 2005). The MJSS is a 44-item, self-administered questionnaire that uses a 6-point Likert-type scale that ranges from 'very satisfied' (6) to 'very dissatisfied' (1). Scores may range from 44 to 264, a higher score indicating increased job satisfaction. The overall

reliability of the MJSS is .96 with inter-item correlations 0.28 - .77 (Misener & Cox, 2001). Subscales of the MJSS include intrapractice partnership/collegiality; challenge/autonomy; professional; social, and community interaction; professional growth; and time and benefits, with reliability ranging from .79 to .94 (Misener & Cox, 2001). Permission was granted to utilize the MJSS in this study (Warner, J., personal communication, 2015) (Appendix B).

Conditions of Work Effectiveness Questionnaire II (CWEQ-II) (Appendix C). Has been used with NPs to evaluate perceived level of empowerment (Almost & Laschinger, 2002; Laschinger et al., 2001; Stewart et al., 2010). Analysis included the responses to the CWEQII, including the total score as well as the six subscales. The CWEQ-II is made of 19-items and measures six sub-scales: opportunity, information, support, resources, formal power, & informal power. The total reliability of the CWEQ-II is .89, with subscale reliability ranging between .67 to .89 (Laschinger, Finegan, Shamian, & Casier, 2000). Scores range from 'none' (1) to 'a lot' (5). The total scores of the CWEQ-II range from 6-30, higher scores indicate higher perceptions of empowerment (M. Donahue et al., 2008). Permission was granted to use the CWEQ-II (Appendix C) in this study (Laschinger, personal communication, 2015).

Sample selection and size

Purposive sampling was used in both the quantitative and qualitative strands of this study. The study is focused on self-employed NPs who own or co-own a community based private practice. The total population of NPs who own their own practice is small, estimated to be only 5.4% (or approximately 9,000) of NPs currently working in the United States (Riley, 2013).

Inclusion criteria. NPs who own or co-own the practice in any of the 50 states or Washington, DC. In order to participate they were required to have owned or co-owned and worked at their practice, either part or full-time for at least 6 months.

Quantitative strand. A power analysis using t-test was completed utilizing a medium effect size of 0.5 and power of 0.80 that identified a recommended sample size of 128 participants (64 per group). To allow for a non-response rate of 25% a minimum of 160 possible participants would need to be contacted (Hulley, Cummings, Browner, Grady, & Newman, 2013). Invitations to participate would be sent out to at least 300 NPs.

Qualitative strand. The sample size in qualitative research is based on the quality of information obtained, rather than a specific sample size per se (Sandelowski, 1995). A sample of between 7 and 15 participants. The goal was to have similar level of representation of states that do and do not require physician oversight for some aspect of NP care. The final number of participants was determined during the combined phase of qualitative data collection and analysis, once data saturation has been reached.

Recruitment of subjects

Quantitative Strand: A leadership conference put on by a national NP organization has an entrepreneurial track for NPs in private practice. An opportunity to collect data during the conference was received by the primary investigator (Appendix D). The entrepreneurial track draws between 100-150 entrepreneurial NPs. It was unclear whether the full number of participants could be obtained at the conference, therefore additional methods were put in place to increase the number of participants.

State Boards of Nursing and national organizations such as the American Association of Nurse Practitioners (AANP) have membership lists that are available to researchers. Other contacts for recruitment include state based organizations of NPs in private practice and information regarding private practices obtained from local and national media including newspaper articles. Leadership in groups in Maine, New Hampshire and Arizona were

contacted, and indicated willingness to help distribute the survey to local NPs in private practice. An online (SurveyMonkey®) and postal survey were utilized depending on the contact information obtained from the various organizations. Nursing organizations provide postal addresses and not email addresses. Upon receipt of the NP names and addresses, postcards Appendix E) were mailed to eligible individuals. The postcard provided a brief introduction to the study. A week to 10 days after the initial postcard was mailed, a letter fully explaining the study (Appendix F) along with the survey was mailed with a stamped return-addressed envelope to allow the participant to return the survey once completed. In the letter it was explained to the potential participants that if they preferred, they could complete the survey online. A week to 10 days after the survey was mailed a second postcard was sent reminding the participants about the survey, again including the online address for survey completion. The surveys were numbered to allow identification of those who completed the survey; this prompted a second postcard to be sent out a month after the survey was posted to those who have not returned the survey.

Barbara Philips, a leader and supporter of NPs in private practice, agreed to assist with distribution of the survey. A SurveyMonkey® link to the survey was posted on her blog.

Qualitative strand. The sample for the qualitative strand of the study was obtained through purposive sampling of participants who completed the survey and indicated an interest in participating in an interview. The goal was to have a similar number of participants from states that do and do not require physician oversight for some aspect of NP practice.

Informed consent procedures

Quantitative Strand. The paper or online survey listed inclusion criteria for the potential participant to review and indicate whether they met the inclusion criteria. When completing the paper survey at the conference the participant read and signed the consent indicating they

understand the contents of the consent form, and that they met the inclusion criteria before transitioning to the survey.

- Postal participants received a cover letter and a copy of the informed consent with the survey. Survey completion indicated implied consent.
- Online participants reviewed the cover letter and consent form, marking a check box to indicate they met the inclusion criteria. Survey completion implied consent.

Qualitative Strand. The consent form and letter sent to participants outlined consent to participate in a semi-structured interview. Consent was reviewed verbally at the time of the interview with completion of the interview implying consent to participate and for the interview to be recorded.

Collection of data and method of data analysis

Quantitative Strand. Both the MJSS and CWEQ-II have been used successfully electronically. The survey was entered into SurveyMonkey® allowing a link to be sent via email and embedded into social media websites. There are 3 sections of the survey. The first section of the survey was the MJSS focused on job satisfaction, and the 2nd section included the CWEQ-II focused on empowerment. The final section included demographic data about the participant and their practice site. The final survey question asked if the participant would be interested in participating in the semi-structured interviews to explore their lived experience in private practice. The respondent provided their email address and phone number for further contact regarding participation in a semi-structured interview.

An experienced NP in private practice for several years reviewed the survey to evaluate ease of use, clarity and time required to complete the survey, prior to beginning the full study.

Following review, the feedback regarding the survey and questions were used to modify the survey for clarification.

Quantitative Data Analysis. Was completed following analysis of the qualitative data to reduce the risk of bias while analyzing the qualitative data. Quantitative data analysis was completed using IBM SPSS v.24. Data from the demographic questionnaire was entered into SPSS including each NP age, gender, years in practice as RN and NP, and highest education level. Information regarding the participant's practice was entered including practice location, patient population and time spent with each patient.

Descriptive statistics of frequencies for the categorical data and means, ranges and standard deviations for interval level data were obtained to explore the data prior to conducting inferential statistics. Histograms, scatter plots and box plots were used to explore for unexpected values or outliers. Missing data, unexpected values and outliers were checked against the survey response for data entry accuracy and corrected as appropriate. Exclusion of cases pairwise was used allowing inclusion in the analyses when the required data is present.

The histogram, skew and kurtosis results were reviewed in the SPSS output, results close to 1.0 indicate normality of distribution allowing the use of the independent t-test and other parametric statistics. Levene's test was used to evaluate for homogeneity of variance. When assumptions for parametric statistics were violated, a non-parametric statistic was used, for example the Mann-Whitney U test was substituted for the independent t-test.

The t-test was used to test the primary hypothesis that there is a difference in job satisfaction between NPs working in states with and without physician oversight. A separate t-test was completed to test whether there was a difference in empowerment between NPs in states with and without physician oversight. Further t-tests were run on each subscale of both the

MJSS and CWEQ-II to explore for any differences. As testing involved both the MJSS and CWEQ-II as well as their subscales, multiple testing was a minor issue within this study.

Pearson's R will be used to test if there is a relationship between empowerment and job satisfaction in NPs in private practice. To assure the integrity of the analysis, evaluation of the assumptions for the Pearson's R were explored, and if one or both of the variables are severely skewed or has an outlier, the non-parametric Spearman rho test was used as an alternative test. A prerequisite for running Pearson R, is that there is a linear relationship between the two variables.

On completion of each inferential statistical test, the results were analyzed in light of the questions asked. The answers to the research questions were used during mixed method analysis when the results were merged with the results from the qualitative strand, and evaluated for convergent or divergent findings, relationships or contradictions.

Qualitative Strand. Qualitative data collection was conducted using semi-structured interviews (Appendix H). Ideally the interviews were conducted in person. However, in order not to limit the study because NPs from various parts of the country were surveyed in the quantitative strand, there were participants who were interviewed using GoToMeeting® based on the participant's location, availability, and preference. The interviews were recorded and transcribed verbatim to allow for analysis and interpretation. The primary investigator and a transcriptionist who signed a confidentiality agreement transcribed the interviews.

The qualitative strand was completed using a hermeneutic phenomenology approach to study the lived experience or lifeworld of NPs in private practice (Cohen, Kahn, & Steeves, 2000; Van Manen, 1990). Hermeneutic phenomenological uses iterative, inductive approach that uses the hermeneutical circle involving reading, reflective writing, and interpretation (Kafle,

2013). During each interview, it was important that the researcher remain neutral (Morse, 1994). Any thoughts or observations were bracketed and documented in a journal for review and exploration during data analysis (Cohen et al., 2000; Morse, 1994).

Coding is the foundation for qualitative data analysis. For this study each interview transcription was analyzed line-by-line identifying the intricacies of participant experience and looking for common ideas, patterns and themes (Morse, 1994). Data collection and analysis occurred concurrently until saturation or redundancy occurred when no new information related to the phenomena was identified, that is it has all been heard before (Cohen et al., 2000; Morse, 1994; Sandelowski, 1995).

Rigor in qualitative research is identified as maintaining the "fidelity to the spirit of qualitative work" (Sandelowski, 1993, p. 2) and accuracy of the information obtained (Creswell & Plano Clark, 2012). Validity for the qualitative strand was verified using member checking. Several participants were asked review the major findings and themes to determine the accuracy of the data analysis and interpretation, any discordance was discussed and data reanalyzed until there was concordance between the researcher and participant evaluators (Creswell, 2014). In qualitative research reliability is related primarily to coding. The primary researcher coded the data. Transcripts were evaluated for accuracy following transcription. During initial coding definitions for each code were developed, and were accessible during ongoing analysis, therefore allowing constant comparisons to be made of coding patterns to ensure consistency (Creswell, 2014).

Mixed Method: mixed methods data analysis was done following completed analysis of both quantitative and qualitative strands; a side-by-side comparison was used (Creswell & Plano Clark, 2012). This involved initially reporting the quantitative results, then discussing the

qualitative themes and whether they agreed with and/or enhanced the quantitative data (Creswell, 2014).

During interpretation, the results from both strands were contrasted to identify if there was concordance or discordance between the findings of the quantitative and qualitative strands of the study (Creswell, 2014). If there was discordance, further evaluation was necessary to identify possible reasons why the results were different and sought to resolve the differences (Creswell, 2014). The results were used to describe the lived experience of NPs in private practice, as well as their perceived level of empowerment and job satisfaction.

Emphasize issues relating to interactions with subjects and subjects' rights.

Ethical issues associated with the survey and semi-structured interviews included minimal risks to participants. No names ever appeared on any survey or research instruments. No individual participant identification was made during data analysis. Responses only appeared in statistical data summaries. All written materials are stored in a locked file draw in the researcher's home. Any data entered or stored on a computer will be password protected. Completed surveys and recorded interviews were deleted and destroyed on completion of the research study. This study poses no risks greater than those encountered in daily life. There are no penalties for non-participation or withdrawal. Most likely, there will be no direct benefit to participants except the knowledge that they are adding to nursing’s understanding of job satisfaction, perceived level of empowerment and experience of NPs working who own a primary care practice. Participation is voluntary and consent implied by completion of the survey; participants are free to withdraw consent at any time, for any reason.

The recordings will be kept until study completion and the results have been compiled and a manuscript submitted for publication. The recordings and transcriptions will be kept in a

locked file drawer; with access only provided for the researcher and dissertation faculty should they need to review a recording or transcript.

CHAPTER 4 – Manuscript 2

This results manuscript is being submitted to the Journal of the American Association of Nurse Practitioners (JAANP) for publication.

Job Satisfaction and Empowerment of Self-Employed Nurse Practitioners: A Mixed Methods-Study

Abstract

Background and Purpose: Self-employed nurse practitioners (NPs) have been part of the American health care landscape since the 1980s, owning practices throughout the United States. The purpose of this study was to explore the lived experience of self-employed NPs, focusing on their level of job satisfaction and perceived level of empowerment.

Methods: The study was a convergent-parallel designed, mixed-method study, utilizing a survey and semi-structured interviews. The survey included the Misener Job Satisfaction Survey (MJSS) and Conditions of Work Effectiveness Questionnaire II (CWEQ-II)

Conclusions: A total of 142 surveys and 13 interviews were completed and analyzed. Nurse practitioners in private practice are both satisfied and empowered, irrespective of practice environment. The more empowered, the higher their level of job satisfaction. Over 40% practiced with full practice authority, in a rural location and 50% had over 10 years' experience as both an RN and NP. Their experience in private practice was explored further in the interviews.

Implications: This study identifies barriers to job satisfaction and empowerment in self-employed NPs, including physician oversight and lack of business management education.

Continuing work to remove, restrictive and reduced state regulatory environments, as well as education on business management, may increase the number of NPs in private practice, expanding access to health care for the American people.

Background and Purpose

The nurse practitioner (NP) role was developed in 1965 to increase the availability of health care providers in the community, schools and hospitals, and to expand the role of the nurse (Pearson, 1985). Advanced practice registered nurses including NPs have graduate education, nursing experience, national certification and ongoing clinical experience. Nurse practitioners have unique knowledge, and are trained to be decision makers using advanced knowledge and skills to care for patients while working in a collegial and collaborative relationship with physicians (Koch et al., 1992; Pearson). They also provide accessible, comprehensive, continuous, affordable primary care to mainstream and underprivileged segments of the populations (Koch et al., 1992; Koelbel et al., 1991b; Pearson, 1985).

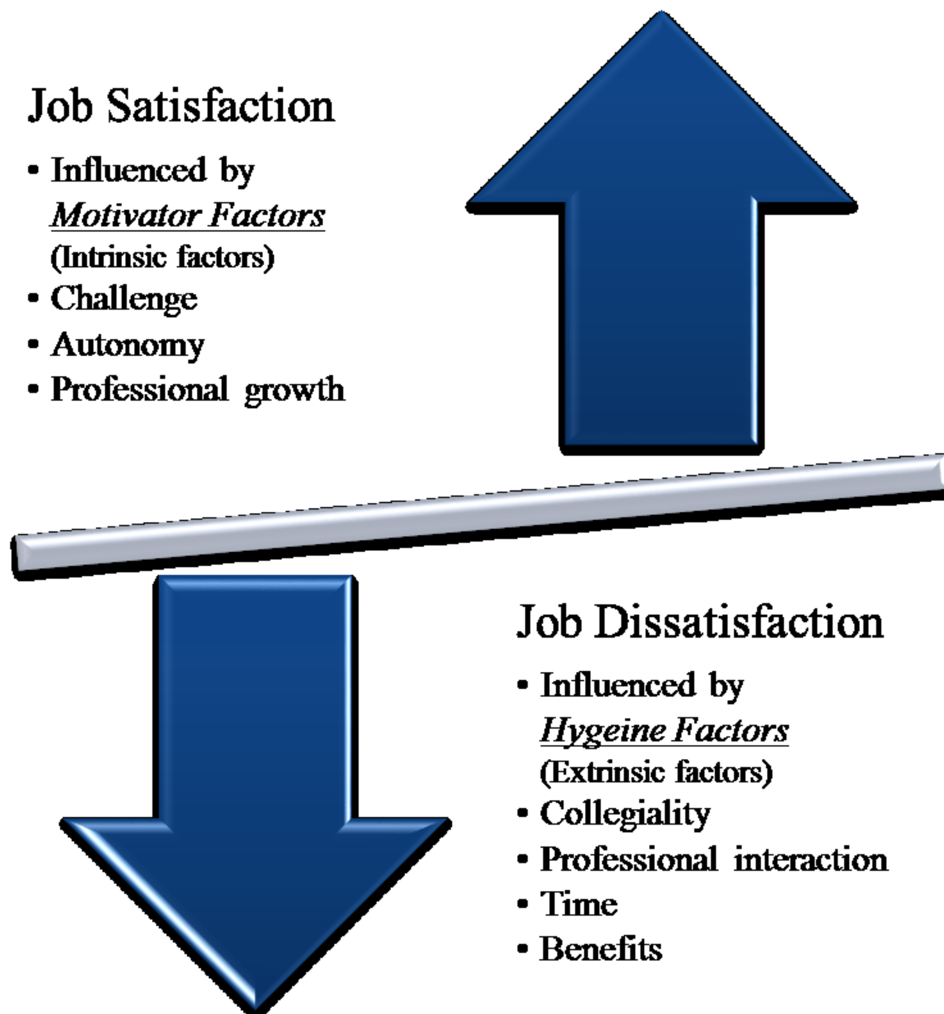
Nurse practitioners are recognized in 50 states, and the District of Columbia (DC) (Currie et al., 2013; Wilson & Jarman, 2002). They are registered with their state board of nursing, as each state independently regulates health care providers' scope of practice. Twenty-one states and the District of Columbia (DC) regulate full practice authority, which means NPs do not require physician oversight to provide patient care. The other states regulate reduced or restricted practice, which requires collaboration or supervision by a physician in order for an NP to provide some aspect of patient care (National Organization of Nurse Practitioner Faculties, 2013). The most restrictive states are Florida, North Carolina, South Dakota and Virginia, which require joint regulation of NP practice by the state boards of nursing and medicine (Lowery, 2012). Collaboration or supervision agreements are voluntary on the part of the physician (National Organization of Nurse Practitioner Faculties, 2013). One of the biggest challenges for NPs is locating a physician who will sign the collaboration agreement (Aaronson, 2013; Gillespie, 2014; The Office of Technology Assessment, 1981; Ungar, 2014; Willis, 1993). Once

signed, a collaborative agreement does not guarantee easy access to the collaborating physician; or security, as the physician may withdraw from an agreement at any time, for example, when practices merge, or a physician moves. Loss of the agreement may force a NP to close their practice until a new agreement is obtained, leaving their patients without a provider (Gillespie, 2014; Ungar, 2014). Since the beginning of the NP movement there has been inequality, politically, legally, economically, and clinically with physicians (Inglis & Kjervik, 1993).

Nurse practitioners have been in private practice since the 1970s (Pearson, 1986). Private practice is defined as practicing within a setting in which "the practice and the practitioner are independent of external policy control other than ethics of the professional and state licensing laws" (Farlex Medical Dictionary, 2009). Nursing literature defines private practice as a solo proprietorship, a partnership, or a collaboration where the individual, a health insurance company, or other third party reimburses the nurse or NP for health care provided (Amundsen & Corey, 2000; Wall, 2013). No research focused on job satisfaction or perceived level of empowerment has been conducted in NPs in private practice.

Job satisfaction affects productivity and job performance (Koelbel, Fuller, & Misener, 1991a). Herzberg identified that job satisfaction and dissatisfaction are on two continua (Herzberg, 1966). Job satisfaction relates to intrinsic work factors that relate to the job itself. In contrast, job dissatisfaction relates to extrinsic factors within the work environment.

Figure 1 – Misener Job Satisfaction Model



Job satisfaction levels have been found to be low to moderate in NPs employed in acute and primary care, retail clinics, and in states with full and restrictive practice environments (Brom, Melnyk, Szalacha, & Graham, 2015; Desborough et al., 2013; Lelli et al., 2015; Pasarón, 2013; Pron, 2013). A study in Arizona (n = 155), identified a subset of self-employed NPs (n=9) that identified a high level of job satisfaction (Schiestel, 2007).

Empowerment means having control over the circumstances or situation so the individual gets the job done (Kanter, 1993). The amount of power affects the individual's ability to access structural factors including:

- Information: knowledge about the organizational decisions, policies and goals.
- Support: including advice, emotional support and hands on assistance.
- Resources: access to time, staff and supplies.
- Opportunities: to increase knowledge and skills.

High levels of empowerment in NPs appear to be associated with an increase in perceived levels of collaboration and autonomy (Stewart et al., 2010). Petersen et al. (2015) found that NPs (n=259) in rural, independent practice in New Mexico, without physician oversight identified a high level of autonomy but a low level of empowerment. Empowerment scores were higher with physician oversight, and were related to increased opportunities to collaborate. This is an unexpected finding and warrants further evaluation in a larger sample.

This study focuses on the level of job satisfaction and perceived level of empowerment of NPs practicing in states with full, restricted and reduced practice environments who own a private practice.

Methods

A convergent-parallel design, mixed-method study approach was used to examine job satisfaction, perceived level of empowerment and the lived experience of self-employed NPs who own or co-own a community based private practice. Quantitative and qualitative data collection were conducted concurrently. Qualitative data collection and analysis was done prior to analysis of the quantitative data to reduce the risk of bias during qualitative analysis.

Following analysis of the data in both strands the results were merged and evaluated for convergent or divergent findings, relationships or contradictions (Creswell & Plano Clark, 2012).

Participants

Purposive sampling was used in both quantitative and qualitative strands of this study. The total population of NPs who own their own practice is small, estimated to be only 5.4% (approximately 9,000) in the United States (Riley, 2013). NPs who own or co-own their practice in any of the 50 states or Washington, DC were included. In order to participate they must have owned or co-owned and worked at their practice either part or full-time for at least 6 months.

The survey

A cross-sectional, purposive sample was used for the survey, which included the Misener NP Job Satisfaction Survey (MJSS) and the Conditions of Work Effectiveness Questionnaire II (CWEQ-II). The demographic questionnaire focused on personal information about the participant and their practice.

The MJSS is a 44-item, self-administered questionnaire that uses a 6-point Likert-type scale that ranges from 'very satisfied' (6) to 'very dissatisfied' (1). Scores ranged from 44 to 264, a higher score indicating increased job satisfaction. The MJSS subscales are intrapractice partnership/collegiality; challenge/autonomy; professional; social, and community interaction; professional growth; and time and benefits, reliability ranging from .79 to .94 (Misener & Cox, 2001).

The CWEQ-II, has been used to evaluate perceived level of empowerment (Almost & Laschinger, 2002; Stewart, McNulty, Griffin, & Fitzpatrick, 2010). The CWEQ-II is made up of 19-items and six sub-scales: opportunity, information, support, resources, formal power, and informal power. The developer's total reliability was .89, while subscale reliability ranged from

.67 to .89 (Laschinger, Finegan, Shamian, & Casier, 2000). Scores range from 'none' (1) to 'a lot' (5). Scores between 6 and 13 are identified as low level of empowerment, 14 to 22 a moderate level, and 23 to 30 a high level of empowerment (DeVivo, Quinn Griffin, Donahue, & Fitzpatrick, 2013).

Procedure

IRB approval was granted by Duquesne University. Postal addresses were provided by AANP. A postcard introducing the survey and providing a link to the online site was sent to 458 NP business owners. A written copy of the survey and consent form, was provided for those who wished to complete the survey on hardcopy. An online NP business-owner consultant placed the study information and a link to the survey on her blog.

The first three survey questions were screening questions answered by clicking "agree" or "disagree". By clicking "agree" they transitioned to the survey. The consent covered both the survey and the interview. The final question asked if they would like to participate in an interview, the participant entered a preferred phone number and/or email address, which was used for follow-up contact. All hardcopy data was added into SurveyMonkey® by the primary investigator and a research assistant working together to ensure accuracy.

Interviews

Semi-structured interviews were used to further explore job satisfaction and empowerment, and the lived experience of NPs in private practice. The NPs who agreed to be interviewed were contacted primarily by email. The GoToMeeting® interviews were recorded and transcribed. Thirteen participants were interviewed for between 60 and 90 minutes. Nurse practitioners from different states as well as the three levels of state regulatory environment identified by AANP were interviewed, which provided "information-rich cases that capture[d]

analytically important variations" in NP experience (Sandelowski, 1999, p. 81). All participants were asked three questions (Table 1), with other individualized questions to further explore the experiences shared.

Table 1 - Interview questions.

Interview questions
Tell me what it means to you as an NP, to be self-employed and own or co-own a community-based private practice?
Think about the reasons you chose to open a private practice. Can you tell me your story?
Is there anything else that you want to tell me that we have not discussed?

Analysis

The data from SurveyMonkey.com® was downloaded directly into IBM SPSS statistics version 24, and checked for errors during data entry. Descriptive analysis was used for reporting the personal and practice background characteristics of the participants, as well as the means of the MNPJSS and CWEQ-II. Identification of missing data was completed and pairwise exclusion was utilized.

All statistical analysis was run utilizing a medium effect size of 0.5 and power of 0.80 based on a previous power analysis. An independent sample t test was used to determine if there was a difference between the levels of job satisfaction of NPs based on state oversight requirements, all assumptions were found to hold. In contrast, a Mann Whitney test was used to determine if there was a difference in empowerment levels based on state oversight requirements, as normality was violated. To test for correlation between job satisfaction and

empowerment and subscales, a Spearman's rank-order correlation was run, as normality was violated.

Qualitative

The qualitative strand was analyzed using a hermeneutic phenomenological approach (Cohen et al., 2000; Van Manen, 1990). Each interview recording was downloaded into NVivo 11 software, and transcribed verbatim. The primary investigator compared the oral and written versions, ensuring accuracy of transcription. The hermeneutic circle guided analysis, which involved reading, reflective writing and interpretation of data to uncover hidden themes (Kafle, 2013). Data immersion, an iterative, inductive process involving reading and re-reading transcripts facilitated identification of important and common ideas (Barritt, Beekman, Bleeker, & Mulderij, 1984; Van Manen, 1990). The ideas were coded; analysis continued by moving between individual and global participant descriptions and codes were clustered to become themes (Cohen, Jenkins, Holston, & Carlson, 2013). No further interviews were scheduled when data saturation was reached during the twelfth interview; the thirteenth interview verified data saturation had been attained (Cohen et al., 2000).

Rigor was maintained through using member checking. Four member-checking interviews were completed using GoToMeeting®, the discussion centered on the meaning of the lived experience of the participant in relation to the themes identified by the primary investigator (Creswell, 2014). The four participants discussed and agreed with the themes as identified. The follow-up interviews lasted from 20 to 40 minutes; they were transcribed, checked for errors against the audio recording, and then analysis was completed.

Mixed Method

Data analysis was conducted following complete analysis of both quantitative and qualitative strands; a side-by-side comparison was used (Creswell & Plano Clark, 2012). During interpretation, the results from both strands were contrasted to check for concordance or discordance between the two strands of the study (Creswell, 2014).

Results

Surveys

A total of 156 (34%) NPs completed the survey online or hardcopy. Fourteen of the surveys had 50% or more missing data and were not utilized for analysis, which resulted in 142 (31%) completed surveys for analysis. A summary of the personal and practice characteristics of the participants is provided below (Table 2).

Table 2 - Demographics of Study Participants: Survey Group and Interview Group.

Surveys (n = 142)			Interviews (n = 13)	
Gender	Female	118 (83%)	Female	11 (84%)
	Male	23 (16%)	Male	2 (16%)
Ethnicity	Caucasian	123 (86%)		
	Hispanic/Latino	6 (4%)		
	African American	5 (3.5%)		
	Native American	2 (1.4%)		
	Asian/Pacific Islander	5 (3.5%)		
Highest Degree	MSN	100(70%)	MSN	11 (84%)
	DNP	32 (23%)	DNP	2 (16%)

	PhD	9 (6%)		
Certification	AANP	69 (48%)		
	ANCC	45(31%)		
	Dual	18 (12%)		
	Other	8 (6%)		
State regulatory environment	Full	60 (42%)	Full	5 (38%)
	Reduced	40 (28%)	Reduced	3 (23%)
	Restricted	42 (29%)	Restricted	5 (38%)
Practice location	Rural	64 (45%)	Rural	9 (69%)
	urban	57 (40%)	urban	4 (30%)
	suburban	15 (10%)		
	Multi-site	4 (2.8%)		
Launch practice	Yes	130 (91%)	Yes	11 (94%)
	No	11 (8%)	No	2 (16%)
Ownership	Solo	124 (87%)	Solo	11 (84%)
	Co-owner	18 (13%)	Co-owner	2 (16%)
Experience RN	1-5 years	16 (11%)		
	5-10 years	23 (16%)		
	>10 years	99 (69%)		
Experience NP	1-5 years	27 (19%)	1-5 years	1 (.8%)
	5-10 years	35 (24%)	5-10 years	3 (23%)
	>10 years	80 (56%)	>10 years	9 (69%)
Years in private practice	1-5 years	72 (50%)	1-5 years	7 (53%)
	5-10 years	41 (29%)	5-10 years	3 (23%)
	>10 years	28 (20%)	>10 years	3 (23%)

The majority of the respondents were female (83%) and Caucasian (86%). Eighty percent had been practicing as an NP for more than five years, and 49% had been in private practice for at least five years. Eighty seven percent are solo owners; 12% co-own their practice.

Responses were received from 44 of the 51 states of America. Sixty (42%) live in states with full practice authority, 40 (28 %) live in reduced practice, and 42 (29%) live in restricted practice environments (Table 3). Of the 82 NPs who require physician oversite, 59% pay a monthly fee, three pay a monthly percentage (5 – 45%), another pays a bonus, one is in partnership with the physician, one NP employees two pediatricians, and one NP enrolls her managed care patients under the physician's name which generates the physician income.

Table 3 - Regulatory characteristics for NP practice owners in states requiring physician oversight (n = 82)

Oversight agreement with written protocols		45 (54%)
Collaborative agreement		30 (36%)
Supervisory agreement		5 (6%)
Payment plan	No payment	10 (12%)
	< $1000	25 (30%)
	$1001 - $2500	13 (15%)
	$2501 - $5000	2 (2%)
	>$5000	2 (2%)

The results from this study indicate that the most common reason an NP opened a practice was to increase autonomy (84.5%), and to personalize and improve patient care (77.5%); respondents also wrote in reasons which are summarized below (Table 4).

Table 4 - Reasons the NPs chose to open a private practice

(n =142)	Frequency	Percent
• Autonomy in the interests of patient care	120	84.5
• To personalize and improve patient care outcomes	110	77.5
• To promote new ideas about health and health care	87	61.3
• Emphasis on caring within a holistic orientation	80	56.3
• To provide an alternative to the medical model	79	55.6
Additional reasons entered by respondents (n = 43)		
• Expand patient options, including palliative care, integrative (1) and functional medicine (2), psychotherapy including medications (2)	9	20
• Financial gain, including 'my retirement plan'	8	18
• Empowerment for self and other NPs, have a voice	8	18
• Flexibility in schedule for family and patients	5	11
• Changing health care environment at previous employer	5	11
• Physician left	2	4
• Second job, clinical (1) and faculty (1)	2	4
• Only pediatric sleep provider for 200 miles	1	2
• Legal changes in state laws	1	2
• Laid off and need to continue caring for my patients	1	2

Sixty-five percent of the NPs practice as a solo provider. Fifty-nine percent see between 11 and 20 patients per day; 69% utilize 30 to 60 minute appointments for a new patient, and 80%

utilize 15 to 30 minute appointments for an existing patient. Sixty percent employ an office manager, 55% employ a billing officer, and 45% employ at least one full-time MA.

Job Satisfaction

The MNPJSS was found reliable with a Cronbach alpha of .93, the Cronbach alpha within the subscales ranged from .76 to .81. When the 44 scale items were analyzed individually, the top items identified as most satisfying were level of autonomy and sense of accomplishment, both intrinsic satisfiers (Table 5). The items identified as least satisfying were being required to have an overseeing physician and lack of administrative support, both extrinsic factors (Table 6).

Table 5 - MNPJSS Items with the Highest Scores

Question	Satisfier	Mean (SD)
• Level of autonomy	Intrinsic	5.7887(0.50)
• Sense of accomplishment	Intrinsic	5.6690 (0.67)
• Freedom to question decisions and practices	Extrinsic	5.6596 (0.64)
• Ability to deliver quality care	Intrinsic	5.6549 (0.69)
• Opportunity to develop and implement ideas	Extrinsic	5.6127 (0.68)

* Scale 1-6

Table 6 - MNPJSS Items with the Lowest Scores

Question	Satisfier	Mean (SD)
• Overseeing physician	Extrinsic	3.5074 (2.74)
• Amount of administrative support	Extrinsic	3.9296 (1.94)
• Retirement plan	Extrinsic	3.9643 (1.68)
• Amount of involvement in research	Extrinsic	4.0935 (1.40)
• Monetary bonuses that are available in addition to your salary	Extrinsic	4.1240 (1.68)

*scale 1-6

The overall job satisfaction is reported as 4.99 (0.56) which is *satisfied*, based on the scale range of '1' (very dissatisfied) to '6' (very satisfied). When the subscales were analyzed the NPs were most satisfied with the level of challenge/autonomy and time. The least satisfying subscales were benefits and professional growth. The results of the subscale analysis are presented below (Table 7).

Table 7 – Cross study comparison of MNPJSS and subscales

	I or E	2017 Self-employed (n = 142)	2015[a] Midwestern center (n = 181)	2013[b] NMHC (n = 99)	2013[c] Florida (n = 17)	2007[d] Arizona NPs (n = 155)
Scale	-	4.99(0.56)	4.23(0.74)	4.63(0.79)	4.33(NA*)	4.69(0.76)
Collegiality (1)	E	4.91(0.69)	3.63(1.03)	4.30(1.10)	3.37(1.21)	4.44(.06)
Challenge/autonomy (2)	I	5.50(0.46)	4.47(0.84)	5.09(0.56)	4.88(0.81)	4.99(0.72)
Professional interaction (3)	E	4.85(0.69)	4.40(0.83)	4.79(0.66)	4.58(0.87)	4.71(0.73)
Professional growth (4)	I	4.71(0.89)	3.64(1.19)	4.19(1.19)	4.14(1.01)	4.43(1.00)
Time (5)	E	5.03(0.78)	4.26(1.04)	4.45(1.10)	4.51(1.02)	4.87(0.92)
Benefits (6)	E	4.40(1.23)	4.99(0.82)	4.93(0.94)	4.74(0.73)	4.47(0.97)

I = intrinsic, E = extrinsic. a (Brom et al., 2015) b Nurse Managed Health Centers (Pron, 2013) c Single Florida health care organization (Pasarón, 2013) – *no SD was provided d(Schiestel, 2007)

State oversight and job satisfaction

An independent t-test did not find a significant difference, with estimates of NPs (n = 60) practicing in states with full practice authority of *m* = 5.01(0.51) and NPs (n = 82) in restricted practice environments, *m* = 4.98(0.59), *p* = 0.76. This indicates that state regulatory environment does not appear to influence job satisfaction in this group of self-employed NPs.

Perceived level of empowerment

The overall mean score of the CWEQ-II was 24.26, which indicates a high level of empowerment. The total CWEQ-II was found reliable with a Cronbach alpha of .88 (subscales ranged from .65 to .92). The highest scoring subscales are opportunity *m* = *4*.42 (0.69), formal power *m* = 4.28 (.77) and information *m* = 4.24 (0.99) (Table 8).

Table 8 - Cross study comparison of CWEQ-II scale and subscales

	2017	2015[a] New Mexico APRN	2010[b] Connecticut NPs	2002[c] PCNPs Ontario
Empowerment	24.26 (3.60)	20.41 (4.14)	25.87 (1.7)	14.71 (1.95)
Opportunity	4.42 (0.69)	4.3 (0.72)	4.18 (0.67)	3.85 (0.49)
Information	4.24 (0.99)	3.16 (1.06)	3.62 (0.9)	4.00 (0.54)
Support	3.76 (1.10)	3.26 (0.99)	3.46 (0.82)	3.51 (0.65)
Resources	3.59 (0.94)	3.06 (0.90)	3.2 (0.75)	3.47 (0.55)
Formal power	4.28 (.77)	3.37 (0.89)	3.41 (0.79)	3.27 (0.39)
Informal power	3.80 (.96)	3.63 (0.89)	3.77 (0.97)	3.86 (0.53)

a (Petersen et al., 2015) b(Stewart et al., 2010) c PCNPs – primary care NPs (Almost & Laschinger, 2002)

State oversight and perceived level of empowerment

A Mann-Whitney U test found that median empowerment scores were not statistically significantly different between NPs (n = 81) practicing in states with restrictive practice environments (*Mdn* = 24.58) and NPs (n = 60) practicing in full practice environments (*Mdn* = 24.58), $p = .957$. This indicates that there is no difference in levels of empowerment based on state practice environments.

Associations between demographic characteristics, job satisfaction and empowerment

Empowerment scores were not affected by practicing in a rural versus an urban location ($p = 0.366$), or based on gender ($p = 0.343$). Perceptions of empowerment did not differ based on years of experience as an RN ($p = 0.675$) or as an NP ($p = 0.180$), or in private practice ($p = 0.618$). However, it appears that NPs with over 10 years' experience as an RN, identified greater opportunities ($p = 0.034$) in private practice than those NPs with 1-5 years' experience as an RN, but not in relation to NPs with 5-10 years' experience as an RN.

Job satisfaction scores were not affected by practice location ($p = 0.924$), or by gender ($p = 0.330$). Job satisfaction levels also did not differ based on years of experience as an RN ($p = 0.880$), or NP ($p = 0.422$), or in private practice ($p = 0.220$). However, it appears that satisfaction with benefits was statistically different, NPs in private practice for over 10 years were more satisfied than NPs with either 1-5 years' ($p = .002$) or 5-10 years' experience in private practice ($p = .022$) with benefits.

Job satisfaction and perceived level of empowerment

A moderately strong positive correlation was identified between job satisfaction and perceived level of empowerment, $r_s(141) = .727$, $p < .0005$ (Table 9). A strong positive correlation was found between job satisfaction and subscales *intrapractice collegiality* and *professional growth*; with moderately strong correlations with *professional interaction, challenge/autonomy, time* and *benefits*. Nurse practitioners identified a moderately strong association between empowerment, and its subscales *supplies, information*, *resources*, as well as *formal* and *informal power*.

Table 9 - Relationships between MNPJSS and CWEQ-II and subscales.
** Correlation is significant at the 0.01 level (2-tailed). n = 142; except [a] when n = 141.

	2	3	4	5	6	JS	Opp	Info	Supp[a]	Res	Form	Infor	Emp[a]
1	.656**	.731**	.683**	.630**	.507**	.943**	.294**	.512**	.551**	.592**	.614**	.433**	.729**
2		.502**	.586**	.560**	.241**	.741**	.494**	.400**	.263**	.400**	.608**	.291**	.538**
3			.590**	.459**	.357**	.791**	.291**	.306**	.496**	.387**	.407**	.494**	.573**
4				.465**	.526**	.810**	.292**	.364**	.414**	.491**	.498**	.414**	.590**
5					.347**	.699**	.132	.355**	.263**	.471**	.430**	.157	.425**
6						.606**	.140	.244**	.318**	.360**	.279**	.278**	.417**
JS							.351**	.487**	.521**	.583**	.620**	.461**	.727**
Opp								.281**	.293**	.100	.409**	.360**	.516**
Info									.521**	.408**	.431**	.294**	.704**
Supp										[a].467**	[a].309**	[a].442**	.782**
Res											.526**	.378**	.718**
Form												.283**	.656**
Inform													.673**

MNPJSS abbreviations: 1 = Collegiality; 2 = Challenge/autonomy; 3 = Professional interaction; 4 = Professional growth; 5 = Time; 6 = Benefits; JS = Job Satisfaction total.
CWEQ-II abbreviations: Opp = opportunity; Info = information: Supp = support; Res = resources; Form = formal power; Inform = informal power; Emp = Empowerment total.

Interviews

The interviewees' demographics (Table 2) did not significantly differ from the survey participants. The practices include three psychiatric practices, five primary care practices, and pediatrics, dermatology, nephrology, home care medicine and palliative care, and women's health and wellness.

Five of the practices are located in unrestricted states, three were located in reduced practice states, and five were located in restricted states. The majority of NPs are in a solo practice with between one and nine staff (Table 10).

Table 10 – Number of practice staff (non-provider) and providers employed.

Number of Staff employed		Number of Providers Employed*	
None	3	Solo NP	6
1 to 9 staff	6	2-3 NP/PA/MD	4
> 10 staff	4	≥ 4 NP/PA/MD	3

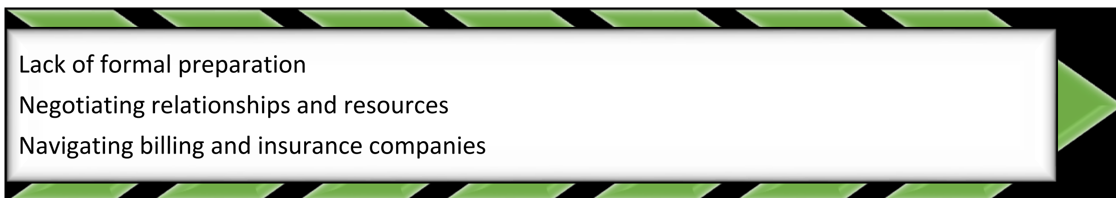
*including owner

Data analysis began using the methods outlined by Barritt et al. (1984), identified 14 coded categories through analysis of the language used and common experiences discussed by the participants. As analysis progressed the 14 categories were confirmed, and 4 major themes related to the lived experience of owning or co-owning a private practice were identified. The major themes are the *journey begins, evolving business acumen, learning day to day management of a private practice*, and *my practice 'my way'*. Four participants were re-interviewed to authenticate the analysis of the transcripts, who verified that the themes reflected their lived experience in private practice. (*Figure 2 is being placed in the ETD document but will not be in the mixed method results manuscript, instead being used in a second qualitative manuscript*.)

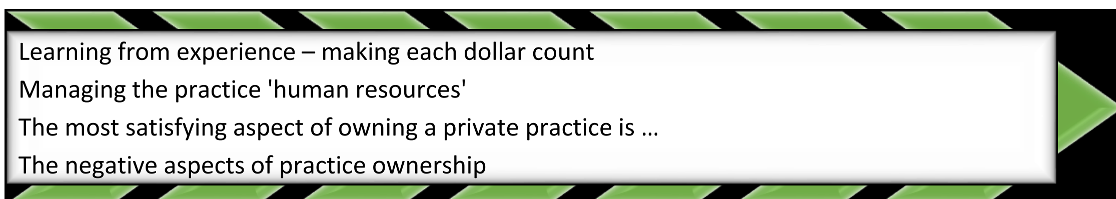
Figure 2 - Major Themes and Categories

The Journey Begins

Evolving business acumen



Learning day-to-day management of a private practice



My practice 'my way'

The Journey Begins

The majority of participants had always dreamed of being an entrepreneur; however, negative employment experiences and increasing job dissatisfaction was the impetus that led to making the dream a reality. A hospital administrator informed one NP, “we don’t pay you to care, we pay you to examine”. Another NP made suggestions “they fell on deaf ears … I felt under-respected and I got fed up with it.” A third NP described his struggle, “You hear complaints … you go to the [management] … nothing changed.”

For those in states requiring physician oversight, finding a physician was an onerous ride. One NP used a recruiting company and interviewed 250 physicians before hiring his first full-time physician. Medicaid assigns different numbers of patients to on-site providers, “1200 patients to [the physician]. [In contrast] an NP is assigned up to 400 Medicaid patients. [At that time] I had a waiting list of 2,000 patients.” He currently employees two full-time physicians.

A common sentiment was having “your education to the degree that we do, and … needing a signature from another professional … that puts us in a more vulnerable” and disempowered position. Restrictive state requirements identified by the NPs, included physician oversight with compensation, chart review, difficulties with paperwork requirements, including completing hospice certification or a death certificate and inability to prescribe schedule IIs, negatively affect empowerment and job satisfaction.

Evolving Business Acumen

A common concern was lack of information and resources regarding business management. One participant stated, “There was no discussion whatsoever in the Master’s program I attended in regards to practitioners owning their own business …no business … administration education”. An NP first sought out information from her NP faculty “nobody could answer that question.” Participants’ obtained support and information from multiple sources including the small business bureau, friends, an online NP business consultant, and other non-NP business owners.

Learning day-to-day management of a private practice

The NPs shared the common struggle of managing employees. The NPs who had no employees or only a single member of staff (Table 12), struggled with ‘doing-it-all’. “I make my appointments … greet the patients… bring them back” After seeing patients all day another NP responded to “25 phone calls a day on my cell phone,” which she returned at night; currently she returns “nine phone calls … the secretary,” manages most of the calls and her schedule.

In contrast, practices that employ ten or more staff identified their difficulties with hiring and managing staff. “We used to get together every month but now we have got so many people and it is tough” to meet and keep everyone informed. While several practices have a stable staff, hiring and keeping staff can be difficult, one commented “I did not expect that much turnover,**” s**truggling to keep a fully staffed practice.

The administrative aspects of business ownership are tedious, nevertheless “paper work and billing … does have to be done or cash doesn't flow”. However, the NPs identified a high level of professional job satisfaction; “the progress my clients have

made", "with just a little … extra time I have been able to see emergency room visits go down, better control of diabetes and COPD", "I wake up every day, happy and excited to go to work. I have families that are immensely grateful".

My practice 'my way'

The majority of NPs described many years of NP practice leading to clear decisions surrounding their practice models. "I do not have to ask anybody's permission. I do not have to fit in to anybody's very narrowly-defined limits ... I get to choose what those restrictions are within the scope of my practice." This has led to personal job satisfaction and empowerment. Another NP's decision to have after-hours call has meant, "We have kept … about 90% … out of the ER." He also added an urgent-care site to his practice; patients can be seen within 24 hours in the office. Other personal comments were shared: one NP's mother became sick and passed away after she opened her practice. The NP had enlisted a trusted employee to care for her mother during that time. As a business owner and a daughter whose mother was dying, she experienced the difference her company made in her own life.

Discussion

The nurse practitioners opened a practice primarily for autonomy in the interests of patient care, to personalize and improve patient care outcomes and to promote new ideas about health and health care, which is concordant with other literature (Agree, 1974; Levin, 1993; Pearson, 1986; Tolman, 2011; Wall, 2013; Wallis, 2013). A small group of NPs indicated they opened their practice for financial gain, as part of their retirement plan. This is in contrast to the survey findings, overall the NPs were

moderately dissatisfied with their retirement plans, however, there appeared to be a weak positive relationship between duration in private practice and retirement plans.

The NPs identified that they were 'satisfied' being self-employed, consistent with other studies where NPs identified their job satisfaction level as moderately satisfied to satisfied (Dunaway & Running, 2009; Pron, 2013; Schiestel, 2007). However, they were slightly less satisfied than Schiestel (2007) found in a small group of self-employed NPs (n = 9) which may be related to the larger, diverse sample in this study. Findings do not indicate a difference in job satisfaction, based on state practice environment, however NPs working in restricted and reduced practice environments were dissatisfied with physician oversight. While the NPs interviewed had a good working relationship with the physician providing oversight, over 50% of the NPs had more than 10 years' experience as a NP; these findings are consistent with Lowery (2012) who found NPs with over five years of clinical experience did not feel the need for supervision.

Requirements for oversight of NPs are state based and include monthly face to face meetings, chart review, and proximity of physician practice to NP. The number of charts reviewed ranges from 5 to 20%, with some states recommending the number be based on physician and NP discretion (AANP, 2016b). Over 50% of the NPs see between 11 and 20 patients a day; the AMA insists through NP scope of practice regulations that 5-20% (between 8 and 320) charts are checked, with timeframes ranging between every 14 days to quarterly, which places a heavy burden on both the NP and overseeing physician (Jacobson, 2013; Tavernise, 2015). As the majority of the NPs have over 10 years' experience in practice it is unclear the benefit of a chart review, for either the NP or patient up to 3 month after being seen and treated. Especially as the

literature supports NPs as well situated to provide care autonomously, as safe practitioners who are aware of the boundaries of their practice, including when to provide care and when to refer (Amundsen & Corey, 2000; Levin, 1993; Maylone et al., 2011; Sommerfeldt, 2013; Tolman, 2011).

Sixty five percent of the self-employed NPs are solo-providers and indicated they found it difficult at times to work alone. It is difficult without support, especially for a NP used to 'hallway consults' with other providers. Working alone and managing the paperwork including book keeping, were the least satisfying aspects of owning a private practice. Pearson (1985) recommended that NPs gain greater control over the economics of their practice, which is affected by reimbursement, state regulatory model and the NPs assertiveness, business and negotiation skills; this appears to remain true 30 years later. The NPs biggest frustration was lack of business education in their NP program whether at a master's or doctoral level. Due to lack of NP business ownership resources including knowledgeable faculty, NPs utilized small business bureaus, other business owners, an online healthcare business consultant and when available NP business owners. The NPs interviewed with one voice recommended that NPs be offered access to business classes focused on accounting, marketing, economics, and business law within their graduate degree. Successfully running a private practice involves managing time to complete administrative tasks including book keeping to keep cash flowing and the practice solvent.

The NPs had a high level of structural power, which is consistent with other studies (Almost & Laschinger, 2002; Petersen et al., 2015; Stewart et al., 2010). Similar to Petersen et al. (2015) this study found a positive relationship between empowerment

and the availability of support, resources, informal power, and intrapractice collegiality. The NPs took the opportunities, information and their power to make a difference for their patients. They adjusted their practice model including scheduling flexibility using creative work practices and making discretionary patient care decisions, such as staffing choices, within established guidelines and within their scope of practice keeping the best interest of the patients at the forefront. They felt informed and had formal power as the business owner to make decisions.

The NPs identified having a collaborative network with other providers based on positive professional interactions, including trust and respect, “I have a good reputation … I could call any specialist and ask a question,”, “You know, it is good to have a little bit of ground to stand on.” However even with strong professional networks, several NPs shared their struggles with physicians who refused to take referrals or share patients with the NPs. One NP shared that a referral practice engaged in negative discourse regarding the NP practice. The NP managed the situation this way, “no one in this practice has referred to his practice. [The referral source] called wanting to know why we are not referring to them?” This NP explained “unless you affect people financially”, nothing changes.

There are no previous studies examining job satisfaction and empowerment in NPs. This group of NPs in private practice identified a positive relationship between job satisfaction and structural empowerment, similar to other studies on Canadian RNs and nurse managers (Laschinger, Finegan, Shamian, & Wilk, 2004; Laschinger, Purdy, & Almost, 2007).

Mixed Methods

The qualitative and quantitative findings of this mixed method convergent-parallel designed study worked together to enhance our understanding of the final results. The survey revealed that the self-employed NPs were satisfied with their choice to move into private practice. Of note, NPs in states with and without physician oversight did not differ significantly in their levels of job satisfaction. They also reported being very satisfied with their level of autonomy, ability to deliver quality care which lead to a strong sense of accomplishment. The NPs also indicated they felt empowered, specifically related to the opportunity to make choices, to explore new options leading to a more successful business, and the utilization of formal and informal power to make the most of the opportunities and resources around them.

Thirteen interviews were completed in this study. Saturation of the qualitative data was achieved, all of the NPs who were interviewed contributed to the four themes. The five who did not require physician oversight did not discuss physician oversight other than to remark on the ease of opening a practice without that requirement. The eight who required physician oversight discussed various difficulties finding and keeping an overseeing physician, which enhanced our understanding of the quantitative results. While NPs were dissatisfied with oversight, the interviewees reported having a good relationship with their overseeing physicians. In contrast, NP interaction difficulties were mainly with local practicing physicians who would not accept referrals or share patients.

The survey indicates that the NPs overall were satisfied with time spent in patient care, reviewing labs and answering messages. Nonetheless, although the NPs interviewed chose to use extended office visits for patient care, they struggled with

answering messages and reviewing labs. Several NPs discussed spending several hours at the end of the day or scheduling weekly administrative days to review labs and complete billing and insurance paperwork. In a similar vein, time for vacation and for continuing education were minimally satisfactory to satisfactory within the surveys. The interviews explained this further, while NPs in solo offices, were able to take time off easily, they either had to close their office, remain on-call, or find coverage. Several solo providers discussed closing their practice and remaining on-call, therefore requiring staff to take the same time off. An NP indicated that she primarily used her time-off for education rather than vacation as time-off was unpaid, because if the office closed they lost income but expenditures including rent continued.

Transitioning into private practice is a journey that starts with the decision to open a practice, and continues for as long as the NP remains self-employed. The NP role continues to evolve, predominantly impacted by the economic, social and political policies vis-à-vis ongoing struggles with supervision and prescriptive regulations (Pearson, 1985). Nurse practitioners are seen as the panacea for the shortage of health care providers specifically in underserved and rural areas, but in order for this to occur, restrictions to NP scope of practice need to be lifted (Robert Wood Johnson Foundation, 2010; Yong-Fang et al., 2013).

Limitations

This study had a 31% response rate, which reduces the researcher's ability to generalize the results to only those who completed the survey. Those NPs that did not complete the survey may have responded differently. This may reflect an issue with completing surveys whether online or using hardcopy, as a vehicle for research. The

findings must be viewed with caution given the cross-sectional design, which captures a one-time snapshot of relationships among variables and precludes strong statements on causality.

Over 50 NPs indicated they would like to be interviewed. However, few of those contacted responded. In spite of that a regulatory environment and nationally diverse group of NPs participated in the interviews; however, nonparticipating NPs may have shared different experiences. Nonetheless, the conversations were rich, and saturation point was reached so that the information may be useful to NPs considering private practice and those organizations that may be able to assist them.

Nursing relevance/implications

This study contributes to our understanding of the impact of self-employment on job satisfaction and empowerment on NPs. The self-employed NPs were satisfied and empowered as owners or co-owners of a practice. The NPs practicing with physician oversight were dissatisfied with having physician oversight, however those interviewed identified having a good working relationship with their overseeing physician. Practice difficulties were experienced with other local physicians who would not accept referrals or share patient care with the NPs. Nurse practitioners working in states with reduced or restricted regulatory practice environments found it difficult to locate an overseeing physician, and were aware that they would have to close should that physician relocate or stop practicing.

Faculty teaching in undergraduate and NP programs both at the masters and doctoral level should add opportunities for business education to their curriculum. Adding formal education will support nurses including NPs interested in opening a

private practice, therefore increasing the number, availability and distribution of health care provider's especially in rural or underserved areas. National and regional nursing and NP organizations should add business administration sessions to conferences.

Ongoing work to remove restrictive state regulatory environments should continue thereby improving access to health care for rural and underserved populations. In the 2015 – 2016 legislative session, 68 bills were introduced, 9 of those were enacted (National Conference of State Legislatures, 2017). Nurse practitioners must support national and state organizations as they seek to remove restrictive practice regulations, it is a war not a single battle.

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Supporting Information

Appendix A

Permission to use the MJSS

Misener Nurse Practitioner Job Satisfaction Scale ©

Copy of Email

Dear Catherine,
Thank you for your inquiry. I have attached the only information that I have on the Misener Job Satisfaction Scale. I apologize that it is not in an online format, but assume you can make that modification. There is no cost associated with the use and I only ask two things (consistent with Dr. Misener's practice): please credit him with the tool and please send a summary of your findings to me. This is official permission to use the scale. I wish you well!
Dr. Warner

Joanne Warner, PhD, RN
Dean, School of Nursing
University of Portland
503-943-7509/warner@up.edu

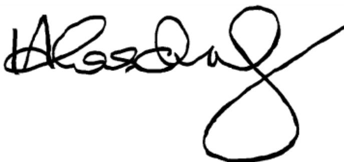
Appendix B

Permission to use Nursing Work Empowerment Scale

I request permission to copy the Nursing Work Empowerment Scale as developed by Dr. G. Chandler and Dr. Heather K. Spence Laschinger. Upon completion of the research, I will provide Dr. Laschinger with a brief summary of the results, including information related to the use of the Nursing Work Empowerment Scale used in my study.
Questionnaires Requested: Conditions of Work Effectiveness-I (includes JAS and ORS):
Conditions of Work Effectiveness-II (includes JAS-II and ORS-II): Yes
Please complete the following information:
Date: 7/3/2015
Name: Cathy Lyden
Title: Exploring the practice experience and job satisfaction of currently practicing Nurse Practitioners who own a primary care practice in the United States
University/Organization: Duquesne University

Description of Study: This mixed-method convergent descriptive study seeks to address the experience of currently practicing Nurse Practitioners who own a Primary Care Practice. The convergent design allows for simultaneous collection of both quantitative and qualitative data. Each participant will first complete the survey, and then those interested will be interviewed for the deeper qualitative exploration.
The survey will include a demographic instrument (researcher developed) along with the Misener Job Satisfaction Scale (MJSS), and the Conditions of work effectiveness questionnaire II (CWEQ-II) which will explore empowerment.

Permission is hereby granted to copy and use the Nursing Work Empowerment Scale.
Date: July 6, 2015



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Appendix A

Demographic Questionnaire

66. What is your gender? Male ☐ Female ☐

67. What is your race?

   a. Caucasian – non Hispanic ☐
   b. African American – non Hispanic ☐
   c. Hispanic ☐
   d. Asian ☐
   e. Native American ☐
   f. Pacific Islander ☐

68. What is your highest degree? BSN ☐ MSN ☐ DNP ☐ PhD ☐

69. Indicate certification status none ☐ AANP ☐ ANCC ☐ other ________

70. What state do you live in? ______________

71. What state is your practice located in? ______________

72. If you live and practice in different states, please explain:

   ____

73. Did you relocate in order to open a private practice? ☐ yes ☐ no

74. If yes, please identify the state that you left ___________ you moved to ___________

75. Ownership of practice: solo ☐ co-own ☐

   Number of owners: _____________

Credentials of owners: ____________

76. How many years' experience as a	1-5 years	5-10 years	>10 years
RN?	☐	☐	☐
NP?	☐	☐	☐

77. How long have you been in private practice?

1-5 years	5-10 years	>10 years
☐	☐	☐

78. Why did you choose to open a private practice? (check all that apply)

autonomy in the interests of patient care ☐

to provide an alternative to the medical model ☐

to personalize and improve patient care outcomes ☐

to promote new ideas about health and health care, ☐

emphasis on caring within a holistic orientation ☐

other (please explain)

____

79. Did you launch the practice Yes ☐ No ☐

80. Did you buy or take over an established practice from a

NP ☐ physician ☐

81. What is the practice zip code? ______________

82. Is your practice considered rural ☐

urban ☐

83. How many patients do you see on an average 8-hour day?

<10 ☐ 11-15 ☐ 15-20 ☐ >20 ☐

84. What is your average time (in minutes) with a:

	15	30	45	60	other
New patient	☐	☐	☐	☐	☐
Existing patient	☐	☐	☐	☐	☐

85. Who are your employees? Full-time > 36 hours/week part-time < 36 hours/week

Office manager full-time ☐ part-time ☐

Billing officer full-time ☐ part-time ☐

Number of NPs (including you) Full-time ☐

Part-time ☐

Medical assistants 1 ☐ 2 ☐ >3 ☐

Nurses (RN) 1 ☐ 2 ☐ >3 ☐

86. Do you have:

Supervisory agreement with a physician yes ☐ no ☐

Collaborative agreement with a physician yes ☐ no ☐

Practice protocols e.g. for meds, yes ☐ no ☐

87. If you pay a fee to a supervising/collaborative physician would you indicate the amount?

Monthly < $1,000 ☐ $1,001 to $2,500 ☐

$2,501 to $5,000 ☐ >$5,001 ☐

Or please indicate percentage of monthly income paid in physician fees

____%

Appendix B

Permission to use the MJSS

Misener Nurse Practitioner Job Satisfaction Scale ©

Copy of Email

Dear Catherine,
Thank you for your inquiry. I have attached the only information that I have on the Misener Job Satisfaction Scale. I apologize that it is not in an online format, but assume you can make that modification. There is no cost associated with the use and I only ask two things (consistent with Dr. Misener's practice): please credit him with the tool and please send a summary of your findings to me. This is official permission to use the scale. I wish you well!
Dr. Warner

Joanne Warner, PhD, RN
Dean, School of Nursing
University of Portland
503-943-7509/warner@up.edu

Appendix C

Permission to use the Nursing Work Empowerment Scale

I request permission to copy the Nursing Work Empowerment Scale as developed by Dr. G. Chandler and Dr. Heather K. Spence Laschinger. Upon completion of the research, I will provide Dr. Laschinger with a brief summary of the results, including information related to the use of the Nursing Work Empowerment Scale used in my study.

Questionnaires Requested: Conditions of Work Effectiveness-I (includes JAS and ORS):
Conditions of Work Effectiveness-II (includes JAS-II and ORS-II): Yes
Please complete the following information:
Date: 7/3/2015
Name: Cathy Lyden
Title: Exploring the practice experience and job satisfaction of currently practicing Nurse Practitioners who own a primary care practice in the United States
University/Organization: Duquesne University
Address: 47 Cypress St, Portland, ME 04103
Phone: 207 807 6710
E-mail: lydenc@duq.edu

Description of Study: This mixed-method convergent descriptive study seeks to address the experience of currently practicing Nurse Practitioners who own a Primary Care Practice. The convergent design allows for simultaneous collection of both quantitative and qualitative data. Each participant will first complete the survey, and then those interested will be interviewed for the deeper qualitative exploration.
The survey will include a demographic instrument (researcher developed) along with the Misener Job Satisfaction Scale (MJSS), and the Conditions of work effectiveness questionnaire II (CWEQ-II) which will explore empowerment.

Permission is hereby granted to copy and use the Nursing Work Empowerment Scale.
Date: July 6, 2015

Dr. Heather K. Spence Laschinger, Professor
School of Nursing, University of Western Ontario
London, Ontario, Canada N6A 5C1
Tel: 519-661-2111 ext.86567
Fax: 519-661-3410
E-mail: hkl@uwo.ca

Appendix D

Letter of Approval from American Association of Nurse Practitioners

August 5th, 2016

Catherine Lyden

Dear Ms. Lyden,

I am writing to confirm that the American Association of Nurse Practitioners (AANP) is supportive of your research project and that you are approved to access a sample of AANP members at our annual Specialty and Leadership conference in September. Having reviewed the proposal, we understand your survey plans and look forward to learning about your findings. Please remember to submit a hard copy summary of the completed research to the AANP Research and Education Department, either by e-mail (research@aanp.org) or by mail:

Attn: Research Team

American Association of Nurse Practitioners PO Box 12846

Austin, TX 78711

At the conference you will be provided a table with two chairs in the exhibit hall area, where attendees typically meet and walk around between sessions. If you want to bring a poster announcing your project, we ask that you submit a draft to AANP. Should you need any other materials such as extra chairs, extension cords or an easel we ask that you submit those to AANP. You will be able to collect data throughout the conference.

I look forward to meeting you at the conference!

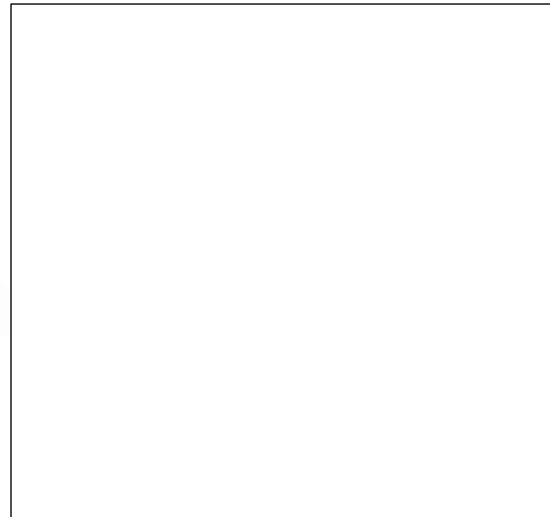
Sincerely,

Vice President of Research

Appendix E

Postcard

This is a sample as actual postcard appeared different due to printing graphic restrictions by Staples – text contents remained the same.



Have you owned or co-owned your practice for over 6 months?
I want to learn more about your practice, job satisfaction and level of empowerment.

Duquesne University

[Address, City, ST ZIP Code]

My dissertation is focused on job satisfaction and empowerment in self-employed NPs in private practice. I will be sending out a survey within the next two weeks, please complete it and return it to me.
The survey is also available online at:

[Contact Info Heading]

Address label will be placed here

Appendix F

Letter to Potential Participants

lks

[Address, City, ST ZIP Code] | [Telephone] | [Email]

August 18, 2016

Dear Nurse Practitioner:
My name is Catherine (Cathy) Lyden and I am a doctoral candidate in the nursing program at Duquesne University in Pittsburgh. For my dissertation research, I am examining job satisfaction and empowerment of self-employed Nurse Practitioners. I received your name and address from a national NP organization indicating that you own or work in a NP owned private practice. If you have owned or co-owned your practice site for at least 6 months, I am inviting you to participate in this research study by completing the attached survey.

The following survey will require approximately between 30 and 60 minutes to complete. There is no compensation for responding nor is there any known risk. If you choose to participate in the project please answer all questions as honestly as possible and return the completed survey promptly in the provided stamped addressed envelope. You may also complete the survey online at ____________________. At the end of the survey you will be asked if you would like to participate in a semi-structured interview to help me learn about your experience as a self-employed NP. The interview will take between 30-60 minutes, and be conducted in person, or using Skype ® or GoToMeeting®, depending on your availability or preference. Participation is strictly voluntary and you may refuse to participate at any time.

Thank you for taking the time to assist me in my educational endeavors. The data collected will provide useful information regarding job satisfaction and empowerment of NPs in private practice. If you would like a summary copy of this study please contact me with your mailing information. Completion and return of the survey will indicate your willingness to participate in the study. If you require additional information or have questions, please contact me or my committee chair, Dr. L. Kathleen Sekula, at

If you are not satisfied with the manner in which this study is being conducted, you may report (anonymously if you so choose) any complaints to the Dr. David Delmonico, Chair of the Duquesne University Institutional Review Board (412) 396 6326.

Sincerely,
lks
RN, FNP-C, MSN-Ed, CCRN, PhD (c).

Appendix G

DUQUESNE UNIVERSITY
600 FORBES AVENUE ♦ PITTSBURGH, PA 15282

CONSENT TO PARTICIPATE IN A RESEARCH STUDY

TITLE: Job Satisfaction and Empowerment of Self-employed Primary Care Nurse Practitioners: A Mixed Methods Study.

INVESTIGATOR: Catherine Lyden

ADVISOR: L. Kathleen Sekula, PhD, PMHCNS, FAAN
Professor, Director, Forensic Nursing Graduate Programs
Duquesne University, School of Nursing

SOURCE OF SUPPORT: This study is being performed as partial fulfillment of the requirements for the Doctor of Philosophy Degree in Nursing at Duquesne University.

PURPOSE: You are receiving this because you have been identified as a NP who owns or co-owns a community based private practice. You are being asked to participate in a research project to explore the practice experience, perceived levels of empowerment and job satisfaction of currently practicing NPs who own or co-own a practice in the United States. The study involves an online or paper survey that will include a demographic survey, the Misener Job Satisfaction Scale (MJSS), and the Conditions of Work Effectiveness Questionnaire II (CWEQ-II), which measures empowerment. The three surveys will take bet 30-60 minutes to complete.

In addition, you may be offered the opportunity to take part in a 30 to 60 minute in-person, Skype® or GoToMeeting® (video chat internet-based) interview that will be scheduled at a time that is convenient for you.
These are the only requests that will be made of you.

RISKS AND BENEFITS: There are no risks greater than those encountered in daily life. There are no penalties for non-participation or withdrawal. Most likely, there will be no direct benefit to you except the knowledge that you are adding to nursing's' understanding of the experience of NPs who own or co-own a private practice.

COMPENSATION: There will not be any payment for completion of the survey. Participation in the project will require no financial cost to you.

CONFIDENTIALITY: If you are reviewing this at the leadership conference you will be asked to sign the consent form prior to completing the survey. If you are receiving this via United States Postal service or completing the survey online, you will be asked to review the consent, however completion of the surveys indicates that you have reviewed and understood the consent form, providing informed consent. Your name will never appear on any survey or research instruments. No individual participant identification will be made during data analysis. Your response(s) will only appear in statistical data summaries.

If you agree to participate in the personal interview by providing your contact information at the end of the survey, you will be asked to indicate your preferred means of being contacted. All information related to your contact information will be kept in a locked file and will not be shared with anyone other than the principal investigator.

If you indicated your agreement to participate in the individual interviews by providing your contact information, you will be assigned a study number and your data will be transcribed by a transcriptionist who will sign a confidentiality agreement and de-identified during analysis. Your responses to the questions will appear within the analysis of all responses and an alias applied to any quotes used within articles or presentations.

All written materials and any consent forms will be stored in a locked file draw in the researcher's home. Any data entered or stored on a computer will be password protected. All materials will be destroyed on completion of the research study and dissemination of the findings.

RIGHT TO WITHDRAW: You are under no obligation to participate in this study. You are free to withdraw your consent to participate at any time.

SUMMARY OF RESULTS: A summary of the results of this research will be supplied to you, at no cost, upon request.

VOLUNTARY CONSENT: I have read the above statements and understand what is being requested of me. I also understand that my participation is voluntary and that I am free to withdraw my consent at any time, for any reason. On these terms, I certify that I am willing to participate in this research project.

I understand that should I have any further questions about my participation in this study, I may call … and/or Dr. David Delmonico, Chair of the Duquesne University Institutional Review Board (412) 396 6326.

____ ____________________

Participant's Signature Date

____ ____________________

Researcher's Signature Date

Appendix H

Qualitative Interview Questions

Key demographics will be identified:

Including – age, experience, practice location, size etc.

1) Tell me what it means to you as an NP to be self-employed and own or co-own a community based private practice your practice?
2) Think about the reasons you chose to open a private practice. Can you tell me your story?
3) Is there anything else that you want to tell me that we have not discussed?

Probing questions such as "tell me more" or "can you give me an example?" or "what was it like?" will be used during the interviews.

Appendix I

Barbara Philips response

Hi Cathy.

Of course. If you can send me a written post, I'll even add it to the blog.

I'd love to see your proposal, and would also like to see the results. We need this kind of research!

Barbara

Best Wishes,

Hillary,
NPBO™ Support Team
NPBusiness.ORG
ClinicianBusinessInstitute.com

On Wed, Aug 24, 2016 at 12:16 PM, Catherine (Cathy) Lyden
<wordpress@npbusinessowner.com> wrote:
Name: Catherine (Cathy) Lyden

Email: lydenc@duq.edu

Subject: Dissertation Research on NPs in private practice

Comment: My name is Cathy Lyden and I am a doctoral student at Duquesne University. My dissertation research involves a mixed methods study focused on self-employed NPs (who own their practice). Self-employed NPs have not previously been studied, yet they are an important group as we look at the future of the US health care system.
I have a survey that focuses on job satisfaction and empowerment, and also plan to interview some of the participants to explore the lived experience of NPs in private practice. Barbara I had contacted you previously regarding working with your organization to get help with obtaining my NP sample for the study. The survey will be available in both a paper and online (surveymonkey) format. I am open to your recommendations, although I have been wondering whether an email might be sent out to your group with a link to the survey attached, and/or whether you might also consider placing a link to the survey on your facebook page.
I look forward to hearing from you. I will forward any information you may need, including my proposal and contact information for my committee chair to allow you to

evaluate this further. I am also available by Skype or phone should you want to discuss this further.
Thank you, Cathy

Time: August 24, 2016 at 10:16 am
IP Address: 72.73.122.116
Contact Form URL: http://npbusinessowner.com/contact/
Sent by an unverified visitor to your site.